SHARP SERVICE MANUAL

No. S5923XL560HE/

XL-560H/E
XL-570H/E

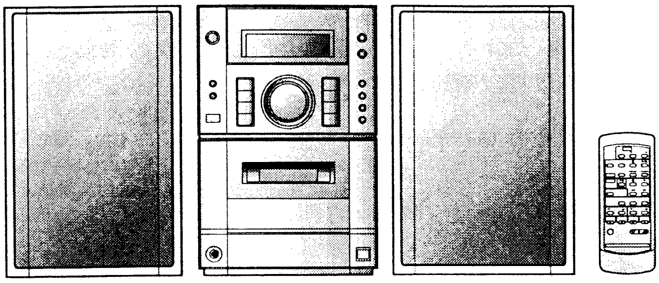

Illustration: XL-560H/570H,CP-XL560H/570H

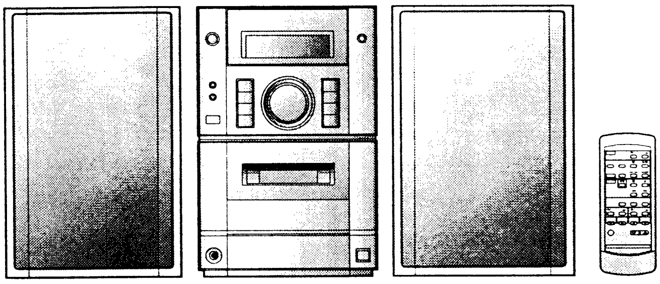

Illustration: XL-560E/570E,CP-XL560H/570H

XL-560H micro component system consisting of XL-560H micro component system and CP-XL560H speaker system.

XL-570H micro component system consisting of XL-570H micro component system and CP-XL570H speaker system.

XL-560E micro component system consisting of XL-560E micro component system and CP-XL560H speaker system.

XL-570E micro component system consisting of XL-570E micro component system and CP-XL570H speaker system.

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

- **Note for users in U.K.**
  Recording and playback of any material may require consent, which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

DIFFERENCE BETWEEN XL-560E/570E AND XL-560H/570H

SECTION	XL-560E/570E	XL-560H/570H
RDS circuit	None	Used
Surround circuit	None	Used
CD Lid Panel	XL-570E Only	XL-570H Only
Speaker Cord	XL-570E Only	XL-570H Only

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SHARP CORPORATION

This document has been published to be used
for after sales service only.
The contents are subject to change without notice.

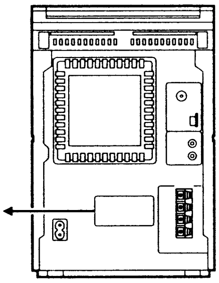
SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam

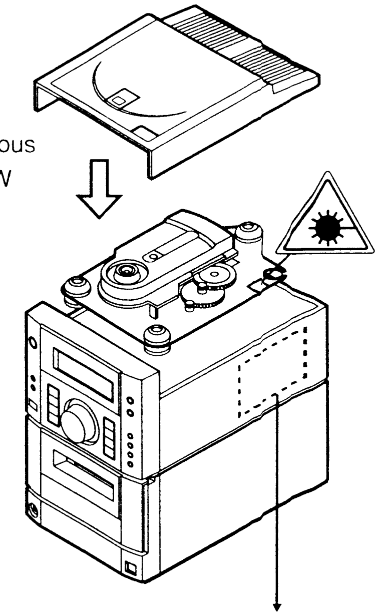
(1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
(2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
(3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
(4) Under no circumstances look directly into the Pickup Lens at any time.
(5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

(For U.K. /Thailand)



CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

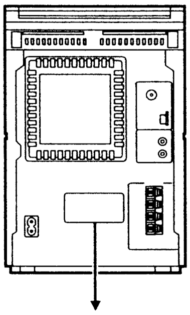
Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW



VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

VARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVISNING SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.

(FOR Europe)



CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1

LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
LASER TŘÍDY 1
LASER TRIEDY 1

CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

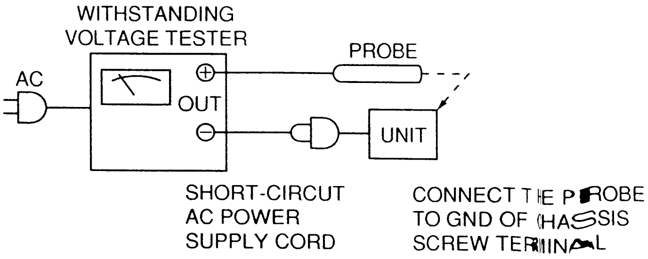
ADVERSEL-USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. STIRR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

IMPORTANT SERVICE NOTES (XL-560E/570E FOR U.K. ONLY)

Before returning the unit to the customer after completion of a repair or adjustment it is necessary for the following withstand voltage test to be applied to ensure the unit is safe for the customer to use.

Setting of Withstanding Voltage Tester and set.

Set name	set value
Withstanding Voltage Tester	
Test voltage	4,240 VPEAK 3,000 VRMS
Set time	6 secs
Set current(Cutoff current)	4 mA
Unit	
Judgment	
OK: The "GOOD" lamp lights. NG: The "NG" lamp lights and the buzzor sounds.	



FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

XL-560H/570H

■ Main unit

● General

Power source:	AC 230 V, 50 Hz
Power consumption:	Stand-by; 0.6 W Power on; 50 W
Dimensions:	Width; 160 mm (6-5/16") Height; 241 mm (9-1/2") Depth; 298 mm (11-3/4")
Weight:	3.3 kg (7.3 lbs.)

● Amplifier section

Output power:	PMPO; 112 W (Total) MPO; 60 W (30 W + 30 W) (DIN 45 324) RMS; 40 W (20 W + 20 W) (DIN 45 324)
Output terminals:	Speakers; 4 ohms Headphones; 16-50 ohms (recommended; 32 ohms) CD digital output (optical)
Input terminals:	Video/Auxiliary (audio signal); 500 mV/47 kohms

● Tuner section

Frequency range:	FM; 87.5-108 MHz AM; 522-1,620 kHz

● Compact disc player section

Type:	Compact disc player
Signal readout:	Non-contact, 3-beam semiconductor laser pickup
D/A converter:	1-bit D/A converter
Filter:	8-times oversampling digital filter
Frequency response:	20 - 20,000 Hz
Wow and flutter:	Unmeasurable (less than 0.001% W. peak)

● Cassette deck section

Frequency response:	50 - 14,000 Hz (Normal tape)
Signal/noise ratio:	50 dB
Wow and flutter:	0.3 % (DIN 45 511)

CP-XL570H

■ Speaker

Type:	2-way [12 cm (4-3/4") woofer and 2.5 cm (1") semi dome tweeter]
Rated input power:	20 W
Maximum input power:	40 W
Impedance:	4 ohms
Dimensions:	Width; 160 mm (6-5/16") Height; 240 mm (9-1/2") Depth; 189 mm (7-7/16")
Weight:	2.2 kg (4.9 lbs.)/each

CP-XL560H

Type:	2-way [10 cm (4") woofer and 1.5 cm (1/16") tweeter]
Rated input power:	20 W
Maximum input power:	40 W
Impedance:	4 ohms
Dimensions:	Width; 160 mm (6-5/16") Height; 240 mm (9-1/2") Depth; 189 mm (7-7/16")
Weight:	1.8 kg (4.0 lbs.)/each

XL-560E/570E

■ Main unit

● General

Power source:	AC 230 V, 50 Hz
Power consumption:	Stand-by; 0.6 W Power on; 50 W
Dimensions:	Width; 160 mm (6-5/16") Height; 241 mm (9-1/2") Depth; 298 mm (11-3/4")
Weight:	3.3 kg (7.3 lbs.)

● Amplifier section

Output power:	RMS; 40 W (20 W + 20 W) (10 % T.H.D.)
Output terminals:	Speakers; 4 ohms Headphones; 16-50 ohms (recommended; 32 ohms) CD digital output (optical)
Input terminals:	Video/Auxiliary (audio signal); 500 mV/47 kohms

● Tuner section

Frequency range:	FM; 87.5-108 MHz AM; 522-1,620 kHz

● Compact disc player section

Type:	Compact disc player
Signal readout:	Non-contact, 3-beam semiconductor laser pickup
D/A converter:	1-bit D/A converter
Filter:	8-times oversampling digital filter
Frequency response:	20 - 20,000 Hz
Wow and flutter:	Unmeasurable (less than 0.001% W. peak)

● Cassette deck section

Frequency response:	50 - 14,000 Hz (Normal tape)
Signal/noise ratio:	50 dB
Wow and flutter:	0.25 % (WRMS)

Specifications for this model are subject to change without prior notice.

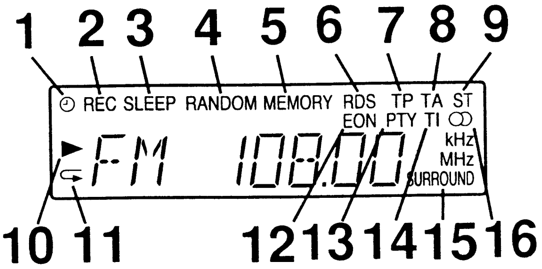
NAMES OF PARTS

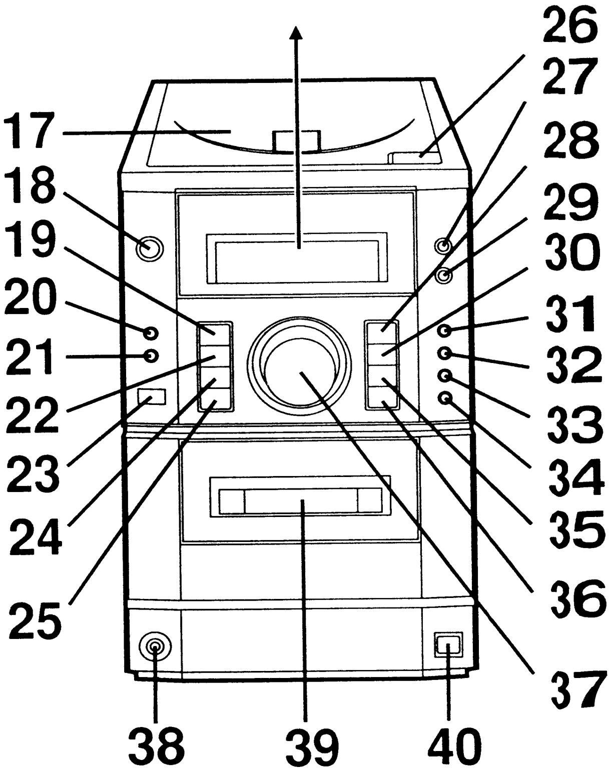
XL-560H/E,570H/E

Illustration: XL-560H/570H

■ Front panel

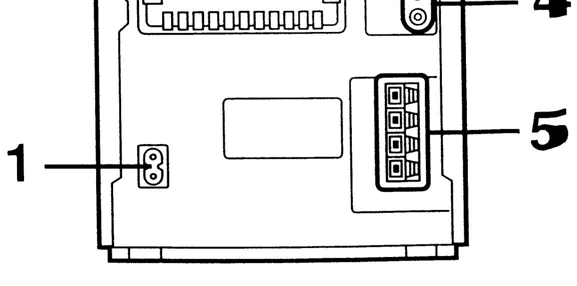
1. Timer Indicator
2. Record Indicator
3. Sleep Indicator
4. (CD) Random Indicator
5. (CD/TUNER) Memory Indicator
6. RDS Indicator (XL-560H/570H Only)
7. Traffic Programme Indicator (XL-560H/570H Only)
8. Traffic Announcement Indicator (XL-560H/570H Only)
9. FM Stereo Mode Indicator
10. (CD) Play Indicator
11. (CD) Repeat Indicator
12. EON Indicator (XL-560H/570H Only)
13. Programme Type Indicator (XL-560H/570H Only)
14. Traffic Information Indicator (XL-560H/570H Only)
15. Surround Indicator (XL-560H/570H Only)
16. FM Stereo Indicator
17. CD Compartment
18. On/Stand-by Button
19. Volume/Jog Dial Selector Button
20. Record Pause/Beat Cancel Selector Button
21. Clock/Timer/Sleep Button
22. Function Selector Button
23. Remote Control Sensor
24. Band Selector Button
25. Memory/Set Button
26. CD Eject Button
27. Bass/Treble Selector Button
28. (CD) Play/Pause Button
    (TAPE) Play Button
29. Surround Button (XL-560H/570H Only)
30. (CD/TAPE) Stop Button
    (TUNER) Clear Button
31. Programme Type/Traffic Information
    Search Button (XL-560H/570H Only)
32. EON Button (XL-560H/570H Only)
33. ASPM Button (XL-560H/570H Only)
34. Display Mode Selector Button (XL-560H/570H Only)
35. (CD) Cue Button
    (TAPE) Fast Forward Button
    (TUNER) Tuning Up Button
36. (CD) Review Button
    (TAPE) Rewind Button
    (TUNER) Tuning Down Button
37. Jog Dial
38. Headphone Socket
39. Cassette Compartment
40. CD Digital Output Socket





■ Rear panel

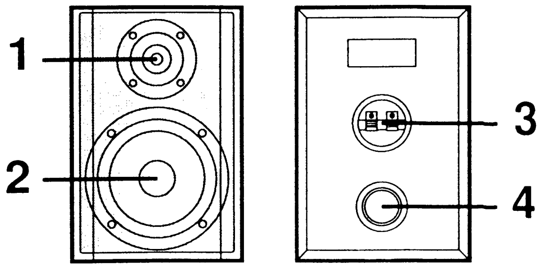
1. AC Power Input Socket
2. FM 75 ohms Aerial Socket
3. AM Loop Aerial Input Socket
4. Video/Auxiliary (Audio Signal) Input
   Sockets
5. Speaker Terminals



CP-XL570H

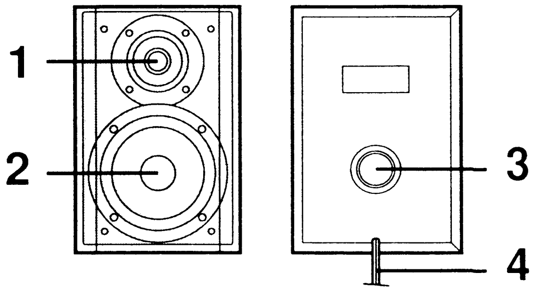
■ Speaker section

1. Tweeter
2. Woofer
3. Speaker Terminals
4. Bass Reflex Ducts



CP-XL560H

1. Tweeter
2. Woofer
3. Bass Reflex Ducts
4. Speaker Wire



XL-560H/E,570H/E

■ Remote control

1. Remote Control Transmitter LED

● Tuner control section

2. Programme Type/Traffic Information Search Button (XL-560H/570H Only)
3. Preset Up/Down Buttons

● CD control section

4. Clear Button
5. Random/Repeat Button
6. Memory Button
7. Stop Button
8. Play/Pause Button
9. Track Down/Review Button
10. Track Up/Cue Button

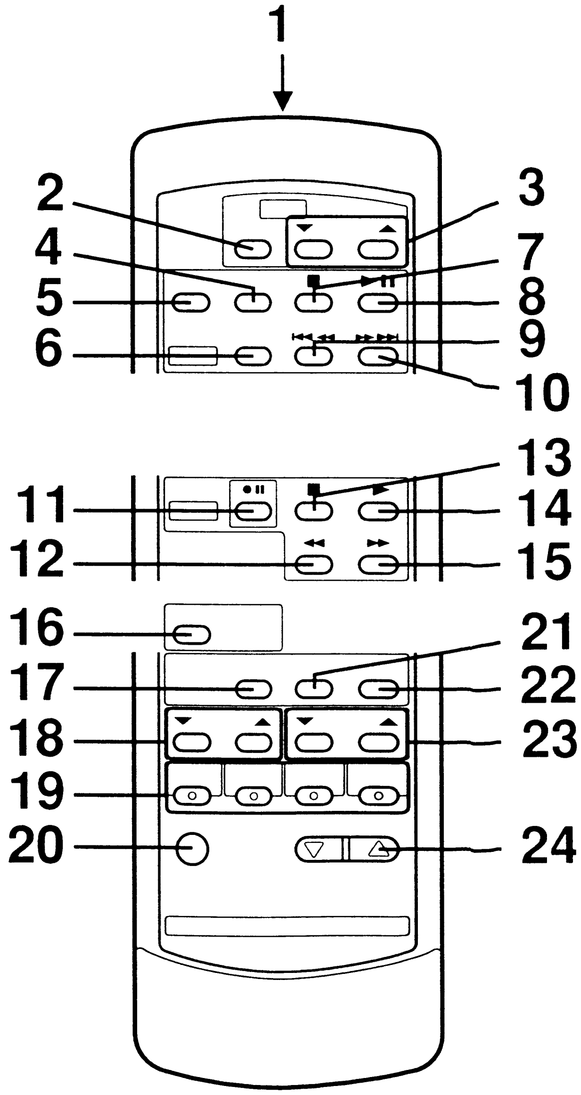
● Tape control section

11. Record Pause/Beat Cancel Selector Button
12. Rewind Button
13. Stop Button
14. Play Button
15. Fast Forward Button

● Common section

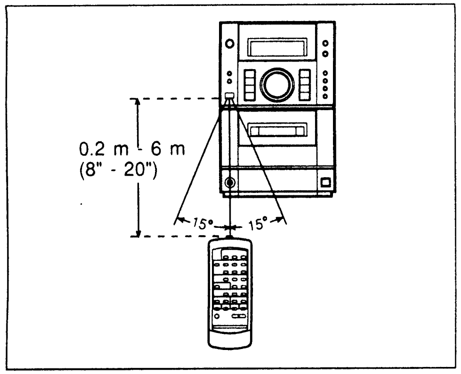
16. Surround Button (XL-560H/570H Only)
17. Sleep Button
18. Bass Up/Down Buttons
19. Function Selector Buttons
20. On/Stand-by Button
21. Timer Button
22. Clock Button
23. Treble Up/Down Buttons
24. Volume Up/Down Buttons

Illustration: XL-560H/570H



PREPARATION FOR USE

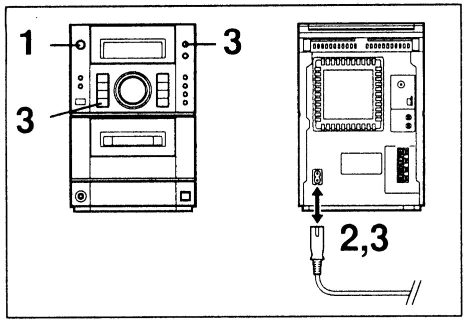
■ Remote control



Notes concerning use:

- Replace the batteries if the operating distance is reduced or if the operation becomes erratic.
- Periodically clean the transmitter LED on the remote control and the sensor on the main unit with a soft cloth.
- Exposing the sensor on the main unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, excessive heat, shock, and vibrations.

RESETTING THE MICRO-COMPUTER



Reset the microcomputer under the following conditions:

- To erase all of the stored memory contents (clock and timer settings, and tuner and CD presets).
- If the display is not correct.
- If the operation is not correct.

1 Press the ON/STAND-BY button to enter the stand-by mode.

2 Unplug the AC power lead from the AC INPUT socket on this unit.

3 Whilst pressing down the MEMORY/SET button and the BASS/TREBLE button, plug the AC power lead into the AC INPUT socket on this unit.

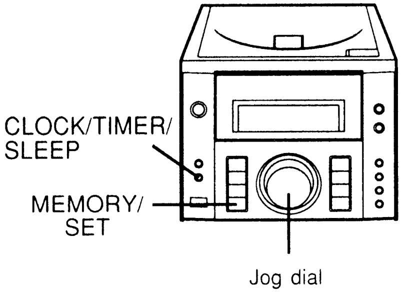
Caution:

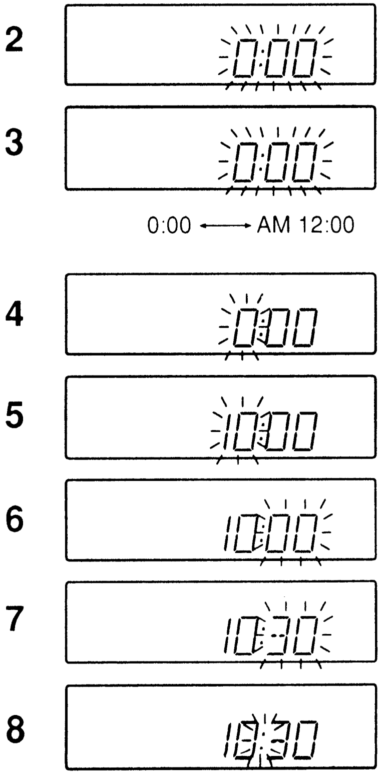
- The operation explained above will erase all data stored in memory, such as clock and timer settings, and tuner and CD presets.

SETTING THE CLOCK

(Main unit operation)

In this example, the clock is set for the 24-hour (0:00) system.





1 Press the CLOCK/TIMER/SLEEP button to enter the time check mode.

2 Within 3 seconds, press the MEMORY/SET button.

3 Turn the jog dial to select the time display mode.
"0:00" → The 24-hour display will appear.
(0:00 - 23:59)
"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)

- Note that this can only be set when the unit is first installed or it has been reset.

4 Press the MEMORY/SET button.

5 Adjust the hour by turning the jog dial.

- When the jog dial is turned one click clockwise, the time will increase by 1 hour. When it is turned one click anti-clockwise, the time will decrease by 1 hour.
  Keep turning the jog dial to change the time continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

6 Press the MEMORY/SET button.

7 Adjust the minutes by turning the jog dial.

- When the jog dial is turned one click clockwise, the time will increase by 1 minute. When it is turned one click anti-clockwise, the time will decrease by 1 minute.
  Keep turning the jog dial to change the time continuously.
- The hour setting will not advance even if minutes advance from "59" to "00".

8 Press the MEMORY/SET button.

- The clock starts operating from "0" seconds. (Seconds are not displayed.)

Note:

- In the event of a power failure or when the AC power lead is disconnected, the clock display will go out.
  When the AC power supply is restored, the clock display will flash on and off to indicate the time when the power failure occurred or when the AC power lead was disconnected.
  If this happens, follow the procedure below to change the clock time.

To change the clock time:

Perform steps 1, 2 and 5 - 8 above.

To change the time display mode:

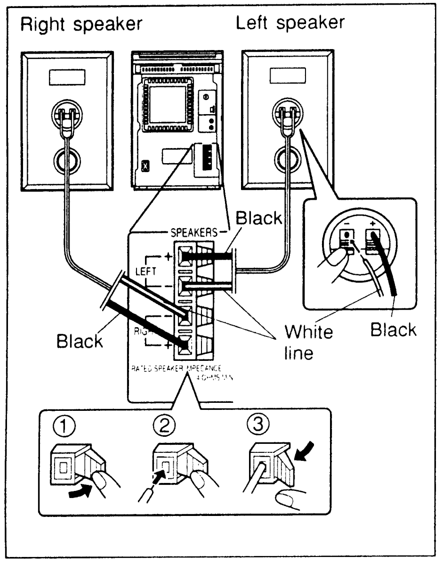
① Perform steps 1 - 3 in the section "RESETTING THE MICROCOMPUTER".

② Perform steps 1 - 8 above.

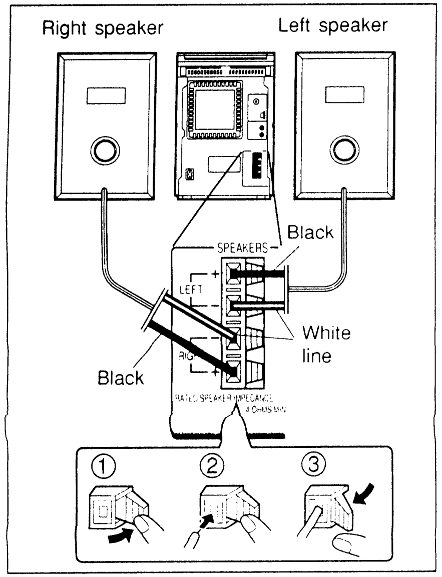
PREPARATION FOR USE

■ Speaker connection

In the case of XL-570H



In the case of XL-560H



- Unplug the AC power lead from the AC socket before connecting or disconnecting any component.

Caution for XL-570H:

- **Before connecting the speakers to the unit, connect the speaker wires to the speakers first. Then, connect the speaker wire to the terminals on the unit.**
- **Connect the speakers to the main unit, and then use the system. If any of the speakers is not connected, the main unit or the speakers may malfunction or may be damaged.**

Connect each speaker wire to the SPEAKER terminals as shown.
Use speakers with an impedance of 4 ohms or more.
Use of speakers with an impedance less than 4 ohms may damage your unit.

- Connect the wire with the white line to the minus (–) terminal and the plain wire to the plus (+) terminal.

Notes:

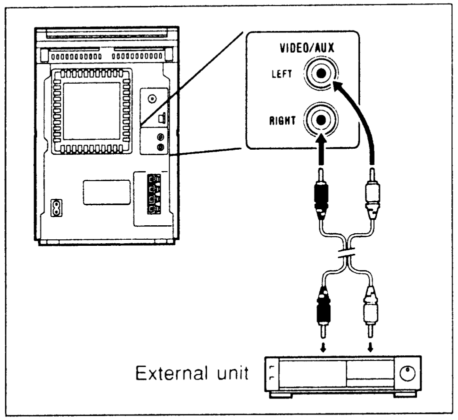
- Do not mix the right channel and left channel wiring when connecting the speakers to the unit.
- Do not let the bare speaker wires touch each other as this may damage the amplifier and/or speakers.
- Do not allow any objects to fall into or to be placed in the bass reflex ducts.

Caution:

- The speakers included with the unit should only be used with the XL-570H or XL-560H. Do not use them with other models. Do not connect the XL-570H's or XL-560H's speaker terminals to any speakers other than those included with the unit.

USING EXTERNAL UNITS

■ VIDEO/AUX (Audio signal) input



To listen to or record signals from external sources through this unit:

1 Use an RCA lead to connect the desired external unit to the VIDEO/AUX sockets.
(red → right channel, white → left channel)

- When using video equipment (Laser Disc player, VCR), be sure to connect the audio output to this unit and the video output to a television.

2 Press the ON/STAND-BY button to turn the power on.

3 Press the FUNCTION button until "AUX" appears in the display.

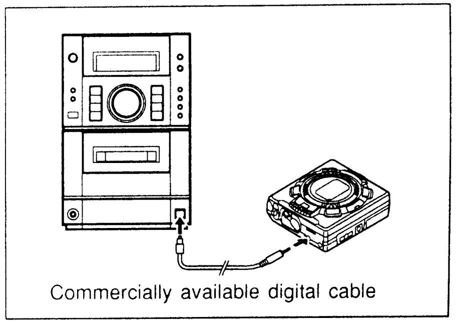
4 Operate the external unit.

5 To record the sound from the external unit, perform steps 2 - 4 of the "Recording from the built-in radio" section.

Note:

- To prevent hum interference, do not place this unit near television receivers.

■ CD digital output (optical)



The CD digital signal from this unit can be recorded by other DAT or MiniDisc recorders.

1 Remove the DIGITAL OUT socket cover.

2 Use a commercially available digital cable to connect the unit to the OPTICAL IN socket of a MiniDisc recorder or a DAT.

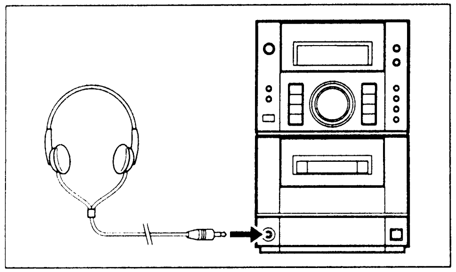
3 Put the external unit in the recording mode.

4 Play a CD on this unit.

Note:

- Only CD signals can be output.

■ Headphones



- Before plugging in or unplugging the headphones, make sure the volume level is reduced.
- *Be sure your headphones have a 3.5 mm* (1/8") diameter plug and are between 16 ohms and 50 ohms impedance. The recommended impedance is 32 ohms.
- When headphones are connected, the speakers are disconnected automatically. Adjust the VOLUME control for desired volume.

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

XL-560H/E,570H/E

STEP	REMOVAL	PROCEDURE	FIGURE
1	Side Panel (Left/Right)	1. Screw .... (A1) x8	8-1
2	Top Cabinet/ Switch PWB (Note)	1. Screw .... (B1) x1 2. Socket .... (B2) x3 3. Hook .... (B3) x2	8-1
3	Rear Panel	1. Screw .... (C1) x3 2. Screw .... (C2) x2	8-1
4	Power Amp. PWB	1. Screw .... (D1) x1 2. Socket .... (D2) x2	8-2
5	Main PWB/ Headphones PWB	1. Screw .... (E1) x3 2. Screw .... (E2) x2 3. Bracket .... (E3) x1 4. Socket .... (E4) x3	8-3
6	Display PWB/ CD Servo PWB/ LED PWB (With Switch PWB)	1. Screw .... (F1) x4 2. Socket .... (F2) x4 3. Knob .... (F3) x1 4. Hook .... (F4) x6	8-3
7	Front Panel	1. Screw .... (G1) x1	8-3
8	Power PWB	1. Screw .... (H1) x4 2. Screw .... (H2) x1 3. Screw .... (H3) x2 4. Bracket .... (H4) x1	8-3
9	CD Digital PWB	1. Screw .... (J1) x1 2. Cover .... (J2) x1	9-1
10	Tape Mechanism	1. Open the cassette holder 2. Screw .... (K1) x4	9-1
11	CD Mechanism	1. Screw .... (L1) x3	9-2

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector to protect the optical pickup from electrostatic damage.

CP-XL560H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Net........................... (A1) x1 2. Front Panel .... (A2) x1 3. Screw .... (A3) x4 4. Screw .... (A4) x2 5. Holder .... (A5) x1	9-3

CP-XL570H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Net........................... (A1) x1 2. Screw .... (A2) x4 3. Ring .... (A3) x1 4. Screw .... (A4) x4	9-4

XL-560H/E,570H/E

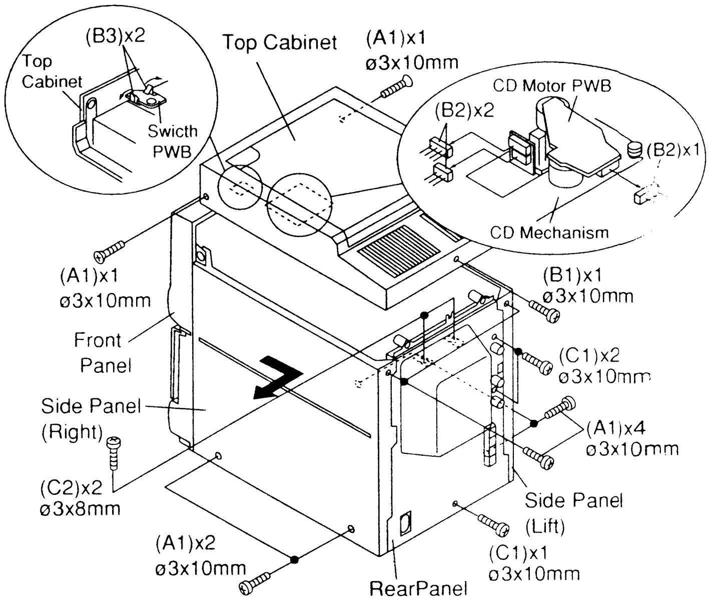

(B3)x2
Top Cabinet
Swicth PWB
Top Cabinet
(A1)x1
ø3x10mm
CD Motor PWB
(B2)x2
(B2)x1
CD Mechanism
(A1)x1
ø3x10mm
Front Panel
(B1)x1
ø3x10mm
(C1)x2
ø3x10mm
Side Panel (Right)
(A1)x4
ø3x10mm
(C2)x2
ø3x8mm
Side Panel (Lift)
(A1)x2
ø3x10mm
(C1)x1
ø3x10mm
RearPanel

Figure 8-1

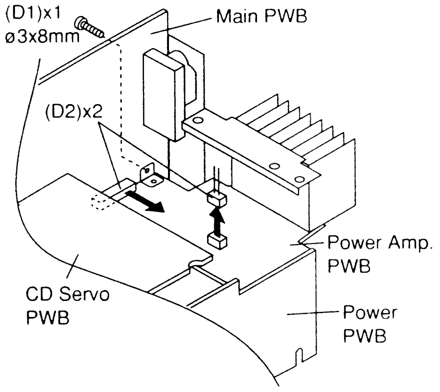

(D1)x1
ø3x8mm
Main PWB
(D2)x2
Power Amp. PWB
CD Servo PWB
Power PWB

Figure 8-2

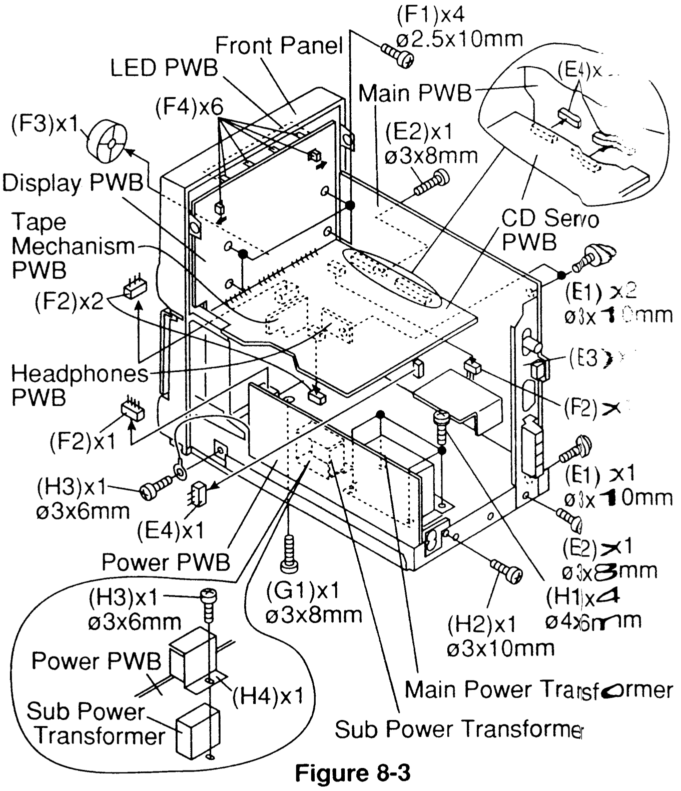

(F1)x4
ø2.5x10mm
Front Panel
LED PWB
(F4)x6
(F3)x1
Main PWB
(E4)x
(E2)x1
ø3x8mm
Display PWB
Tape Mechanism PWB
CD Servo PWB
(E1) x2
ø3x10mm
(F2)x2
(E3)
(F2)x
Headphones PWB
(F2)x1
(E1) x1
ø3x10mm
(H3)x1
ø3x6mm
(E4)x1
(E2)x1
ø3x8mm
Power PWB
(H1)x4
ø4x6mm
(H3)x1
ø3x6mm
(G1)x1
ø3x8mm
(H2)x1
ø3x10mm
Power PWB
(H4)x1
Main Power Transformer
Sub Power Transformer
Sub Power Transformer

Figure 8-3

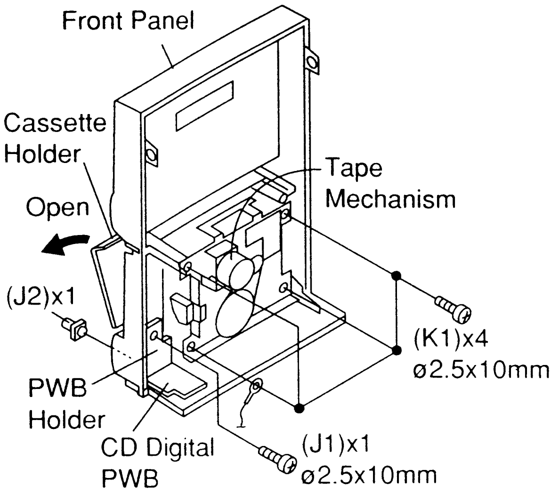

Front Panel
Cassette Holder
Open
Tape Mechanism
(J2)x1
(K1)x4
ø2.5x10mm
PWB Holder
CD Digital PWB
(J1)x1
ø2.5x10mm

Figure 9-1

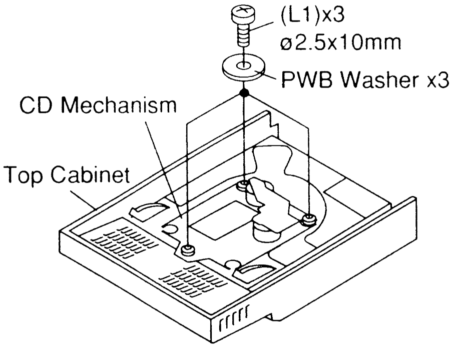

(L1)x3
ø2.5x10mm
PWB Washer x3
CD Mechanism
Top Cabinet

Figure 9-2

CP-XL560H

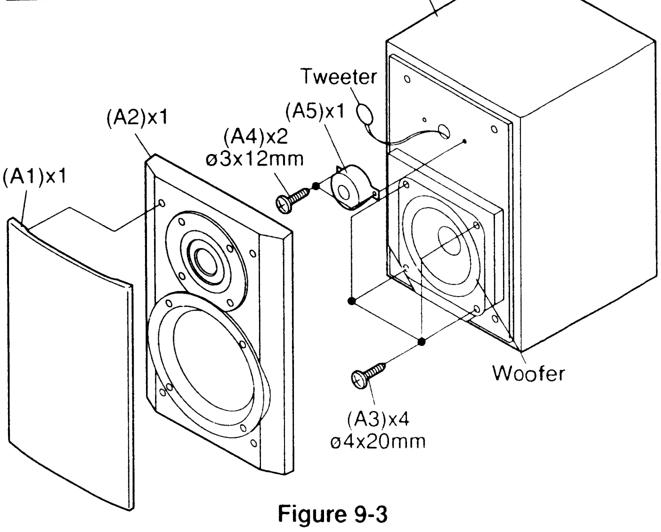

Speaker Box
Tweeter
(A5)x1
(A2)x1
(A4)x2
ø3x12mm
(A1)x1
Woofer
(A3)x4
ø4x20mm

Figure 9-3

CP-XL570H

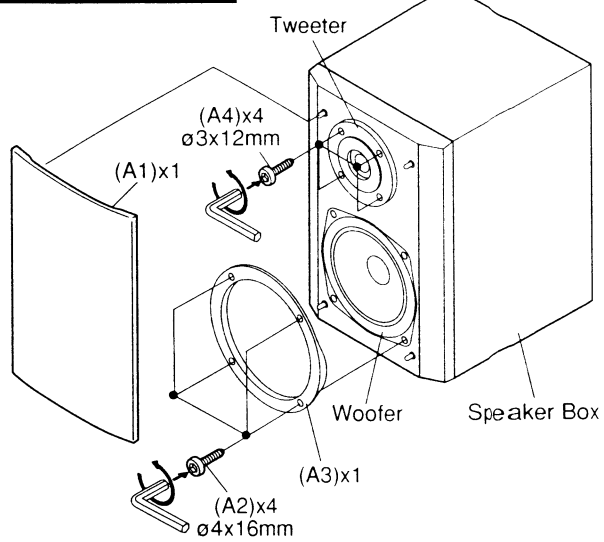

Tweeter
(A4)x4
ø3x12mm
(A1)x1
Woofer
Speaker Box
(A3)x1
(A2)x4
ø4x16mm

Figure 9-4

REMOVING AND REINSTALLING THE MAIN PARTS

CD MECHANISM SECTION

Perform steps 1 to 6 and 11 of the disassembly method to remove the CD mechanism.

How to remove the pickup (See Fig. 9-5)

1. Remove the mechanism cover, paying attention to the pawls (A1) x 4 pcs.
2. Remove the screws (A2) x 2 pcs., to remove the shaft (A3) x 1 pc.
3. Remove the stop washer (A4) x 1 pc., to remove the gear (A5) x 1 pc.
4. Remove the pickup.

Note:
After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of connector to protect the optical pickup from electrostatic damage.

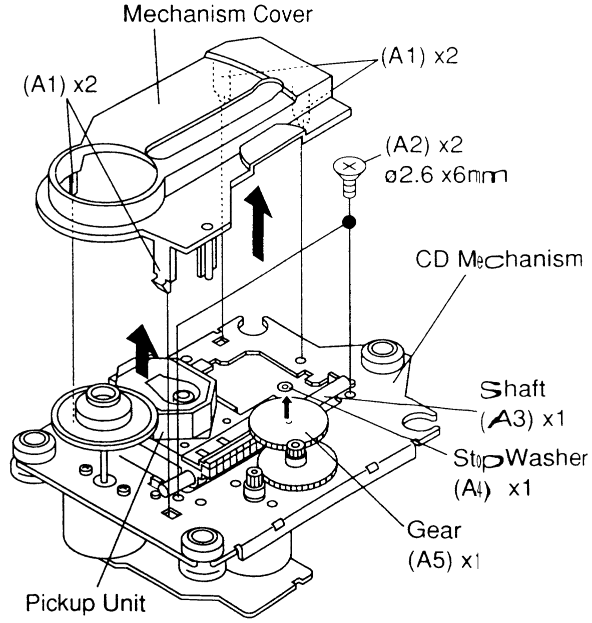

Mechanism Cover
(A1) x2
(A1) x2
(A2) x2
ø2.6 x6mm
CD Mechanism
Shaft
(A3) x1
Stop Washer
(A4) x1
Gear
(A5) x1
Pickup Unit

Figure 9-5

ADJUSTMENT

MECHANISM SECTION

- **Driving Force Check**

Torque Meter	Specified Value
Play: TW-2412	Over 80 g

- **Torque Check**

Torque Meter	Specified Value
Play: TW-2111	30 to 60 g. cm
Fast forward: TW-2231	55 to 140 g.cm
Rewind: TW-2231	55 to 140 g.cm

- **Tape Speed**

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Motor (M901)	3,000 ± 90 Hz	Headphone terminal

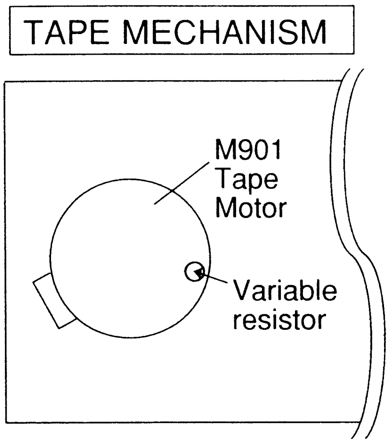

TAPE MECHANISM
M901
Tape
Motor
Variable
resistor

Figure 10-1 ADJUSTMENT POINT

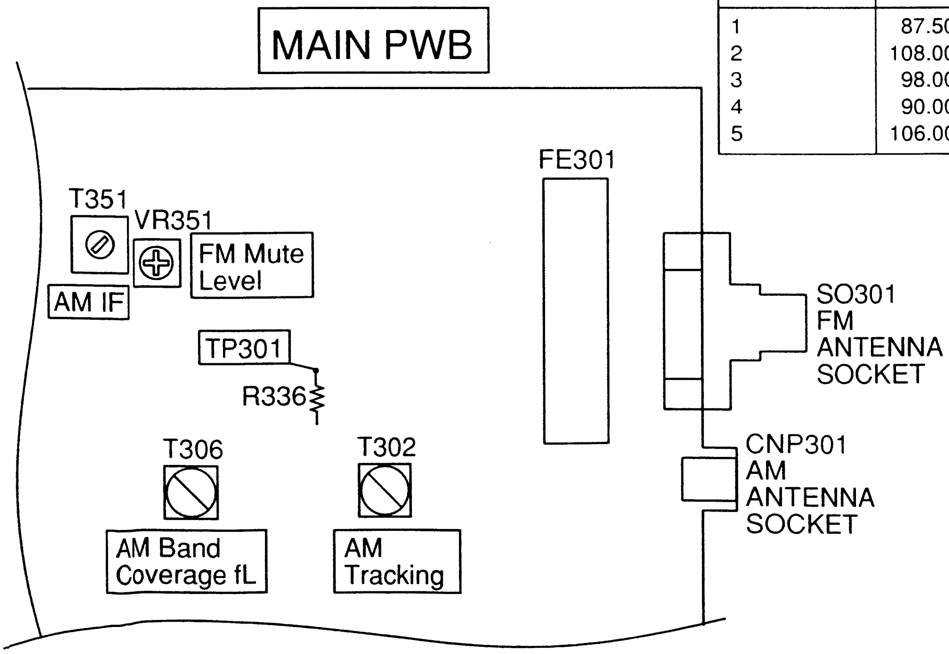

MAIN PWB
FE301
T351
VR351
FM Mute
Level
AM IF
TP301
R336
SO301
FM
ANTENNA
SOCKET
T306
T302
AM Band
Coverage fL
AM
Tracking
CNP301
AM
ANTENNA
SOCKET

Figure 10-2 ADJUSTMENT POINTS

TUNER SECTION

fL: Low-range frequency
fH: High-renge frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	T302	*1

*1. Input: Antenna, Output: Speaker Terminal
*2. Input: Input is not connected, Output: TP301

- **FM Mute Level**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (25 dBμV) [For U.K.] (30 dBμV) [For Europe]	98.00 MHz	VR351*1	Input: SO301 Output: Speaker Terminal

*1. Adjust so that an output signal appears.

- **Check FM VT**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Check Point	Instrument Connection
87.5 MHz	87.5 MHz	2.2 V ± 0.7 V	TP301
108 MHz	108 MHz	7.3 V ± 1.0 V	TP301

- **Setting the Test Mode**

Keeping the FF/FWD button and MEMORY/SET button pressed, turn on POWER. Then, the frequency is initially set in the memory as shown in Table. Call it with the JOG DIAL knob to use it for adjustment and check of tuner circuit.

Preset No.	FM STEREO	Preset No.	AM
1	87.50 MHz	6	522 kHz
2	108.00 MHz	7	1,620 kHz
3	98.00 MHz	8	990 kHz
4	90.00 MHz	9	603 kHz
5	106.00 MHz	10	1,404 kHz

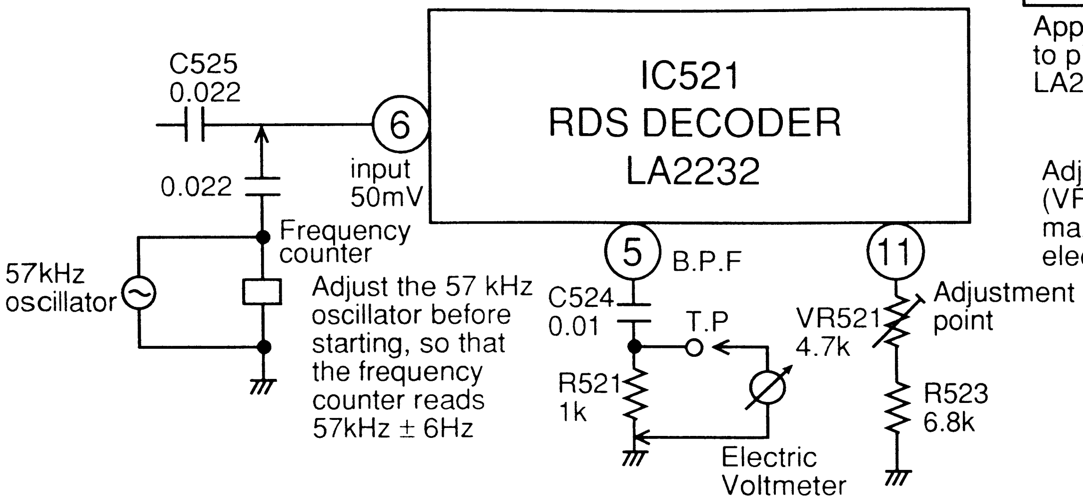
Preset No.	BAND
11~25	

Preset No.	FM MONO
26	106.00 MHz
27	90.00 MHz
28	98.00 MHz
29	108.00 MHz
30	87.50 MHz

RDS (RDS circuit is only for XL-560H/570H)

In order to receive RDS broadcasts, adjust the preset variable resistor as follows.
Adjust the center frequency of the 57 kHz BPF (band-pass filter) using the variable resistor (VR521).

Receiver: Connect the SG output to the aerial terminal.
It is not necessary to connect the speaker output terminal.
Set the frequency display to 98 MHz to tune in the 98 MHz frequency.



Adjust the 57 kHz oscillator before starting, so that the frequency counter reads 57kHz ± 6Hz

Procedure

Apply 57 kHz, 50mV(ms) to pin (6) of the input on LA2232.

↓

Adjust the variable resistor (VR521) until you have the maximun value on the electric voltmeter.

↓

Done

RDS (Radio Data System) OPERATION

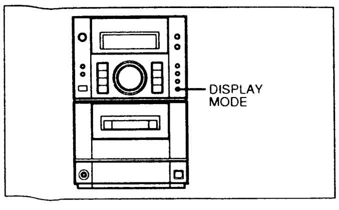
RDS is a broadcasting service which a growing number of FM stations are now providing. It allows these FM stations to send additional signals along with their regular programme signals. For example, the stations send their station names, and information about what type of programme they broadcast, such as sports or music, etc.
When tuned to an FM station providing the RDS service, RDS will appear, the station frequency (and then the station name if sent) will be displayed.
The TP (Traffic Programme) will appear on the display when the received broadcast carries traffic announcements, and the TA (Traffic Announcement) will appear whilst a traffic announcement is being received.
EON will appear whilst the EON (Enhanced Other Networks information) data is being broadcast.

Note:
When the TP and TA appear at the same time, an announcement is being made.
When only the TA appears, an announcement is not being made. (See page 21.)

■ Information Provided by RDS

With the XL-570H/XL-560H, you can display two types of RDS service. To show them in the display, press the DISPLAY MODE button.
Each time you press the DISPLAY MODE button, the display will change to show the following information.

PS (Programme Service):	Station names commonly known will be displayed. "NO PS" appears if no signal is being received.
PTY (Programme Type):	Programme type will be displayed. "NO PTY" appears if no signal is being received.
Station Frequency:	Station frequencies.



Descriptions of the PTY (Programme Type) codes. TP (Traffic Programme) and TA (Traffic Announcement)
With the XL-570H/XL-560H. you can search for and receive the following PTY. TP and TA signals.

NEWS:	Short accounts of facts, events and publicly expressed views, reportage and actuality.
AFFAIRS:	Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.
INFO:	Programmes whose purpose is to impart advice in the widest sense.
SPORT:	Programme concerned with any aspect of sport.
EDUCATE:	Programme intended primarily to educate, of which the formal element is fundamental.
DRAMA:	All radio plays and serials.
CULTURE:	Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.
SCIENCE:	Programmes about the natural sciences and technology.
VARIED:	Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.
POP M:	Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
ROCK M:	Contemporary modern music, usually written and performed by young musicians.
EASY M:	Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country, Music in this category is often but not always, vocal, and usually of short duration.

(Continued)

LIGHT M:	Classical Musical for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.
CLASSICS:	Performances of major orchestral works, symphonies, chamber music etc., and including Grand Opera.
OTHER M:	Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.
WEATHER:	Weather reports and forecasts and Meteorological information.
FINANCE:	Stock Market reports, commerce, trading etc.
CHILDREN:	For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.
SOCIAL:	Programmes about people and things that influence them individually or in groups, Includes: sociology, history, geography, psychology and society.
RELIGION:	Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.
PHONE IN:	Involving members of the public expressing their views either by phone or at a public forum.
TRAVEL:	Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for Announcements about problems, delays, or roadworks affecting immediate travel where TP/TA should be used.
LEISURE:	Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine etc.
JAZZ:	Polyphonic, syncopated music characterised by improvisation.
COUNTRY:	Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.
NATION M:	Current Popular Music of the Nation or Region in that country's language, as opposed to international 'Pop' which is usually US or UK inspired and in English.
OLDIES:	Music from the so-called "golden age" of popular music.
FOLK M:	Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or the people.
DOCUMENT:	Programme concerned with factual matters, presented in an investigative style.
TEST:	Broadcast when testing emergency broadcast equipment or receivers.
ALARM:	Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.
NONE:	No programme type (receive only)
TP:	Broadcasts which carry traffic announcements
TA:	Traffic announcements are being broadcast at present.

Note:
- When the unit is in the EON stand-by mode and a programme is selected, the unit will display "TI" instead of "TP" or "TA".

TEST MODE

The test mode applied to this microcomputer has three modes, namely ordinary test mode to be used for adjustment or measurement, aging test mode to be used for aging test, and self-diagnosis test mode for self-inspection in case of final product inspection.
The test mode specification prescribes the microcomputer with RDS (RH-IX0014SJZZ Serial No. 904xxxxx) and the microcomputer with RDS (RH-IX0021SJZZ Serial No. 905xxxxx~).

1. Turning on the test mode

To turn on the specific test mode, press the POWER button, holding down the following two buttons in the ordinary stand-by mode (power off state). In this case only the main unit button is valid. Even when the POWER of remote control button is set to on, the test mode is not turned on.

[Ordinary test mode]
1. CD Test Mode (TEST 1).............................. BASS/TREBLE + PLAY
2. Tuner Test Mode (TEST 2)........................... FF/FWD + MEMORY/SET
3. Electronic volume Test Mode (TEST 3)............ STOP + BASS/TREBLE
4. Timer Test Mode (TEST 4)........................... FF/FWD + BAND
5. LCD Test Mode (TEST 5).............................. MEMORY/SET + REW/REV

[Self-diagnosis Test Mode]
1. Button input diagnosis test mode (TEST6).......... FF/FWD + REC PAUSE

(RDS circuit is only for XL-560H/570H)

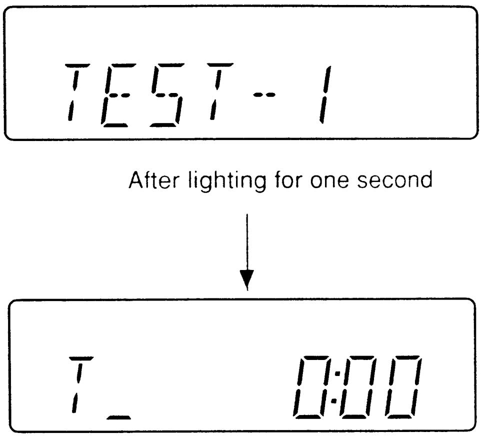
* Only for this mode four turning-on buttons are ...... FUNCTION + RDS PTY-TI
provided. The differ insignificantly in processing after turning-on.
For the microcomputer without RDS, there are two turning-on buttons, since the two buttons (using the RDS buttons) are not provided.

2. CD Test Mode (TEST 1)

In the CD test mode the operation of each step is enabled even when the LID-SW is off. However, if focus cannot be set in step 3 or any error processing is started, it is impossible to proceed to the next step. When the error processing is started, operations other than termination of test mode by pressing the POWER button or return to the step 1 by pressing the STOP button are inhibited.

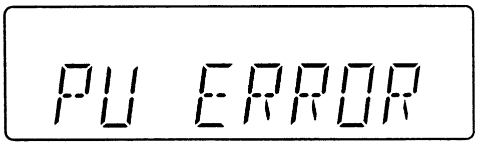
1. Step 1 Mode

When the CD test mode is turned on, the following indication lights, the processing (until turning-off of CD STB terminal of CD initialization operation flow) is executed, and the next button input is waited.



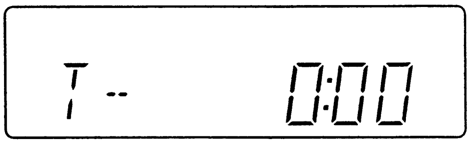
If the following operation buttons are pressed in this state, the operation is performed as follows.
"POWER" .... The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
"FF/FWD" .... After the pickup returns once to the innermost periphery, it slides toward the outer periphery while this button is held down.
"REW/REV" .... After the pickup returns once to the innermost periphery, it slides toward the inner periphery while this button is pressed. However, if PU-IN is on, input is invalid.
"PLAY" .... Shift to step 2
"STOP" .... Invalid
"REC PAUSE" .... Shift to step 5

* In case of initialization the pickup is moved toward the inner periphery. Any buttons other than "POWER" button are not accepted until the shift of pickup to the inner periphery is completed at this time. If PU-IN SW ON cannot be detected within 10 seconds, the slide motor is stopped, and the following error indication appears. Press the POWER button to end the test mode, or press the STOP button to return to step 1. Any other operations are inhibited.



2. Step 2 Mode

When the "PLAY" button is pressed in this mode, the laser lighting command LDON (8400) is sent, and the laser is turned on. Other operations are not performed.

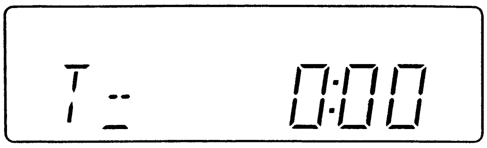


If the following buttons are pressed in this state, the operation is performed as follows.
"POWER" .... The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is held down.
"REW/REV" .... The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.
"PLAY" .... Shift to step 3
"STOP" .... Return to step 1
"REC PAUSE" .... Shift to step 5

3. Step 3 Mode

The laser is kept lighting. The processing (until turning-on of CLV servo of CD initialization operation flow) is executed, and the next button input is waited. (The focus servo is turned on, and focus search is performed.)

The focus search is repeated until the focus is set.



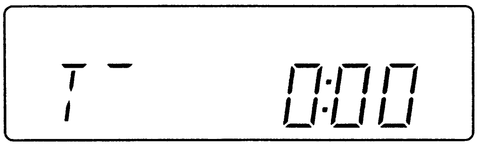
When the following operation buttons are pressed in this state, the operation is executed as follows.

"POWER" .... The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is held down.
"REW/REV" .... The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.
"PLAY" .... If the focus has been set, shift to step 4 is executed. If the focus has not been set, acceptance is inhibited.
"STOP" .... Return to step 1
"REC PAUSE" .... Shift to step 5

*If the focus is disturbed after it has been set, the process returns to step 1.

4. Step 4 Mode

The CLV servo ON command (8600) sending operation is performed, and the next button input is waited. (The disc is rotated to perform CLV locking.)



The time display indicates always "0:00".

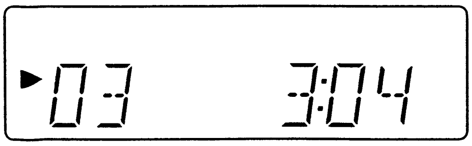
When the following buttons are pressed in this state, the operation is executed as follows.

"POWER" .... The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is held down.
"REW/REV" .... The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.
"PLAY" .... Shift to step 5
"STOP" .... Return to step 1
"REC PAUSE" .... Shift to step 5

*If the focus is disturbed, the process returns to step 1.

5. Step 5 Mode

The CD initialization operation flow is executed to the end, the mute is set to off, and playback is started. Even when the playback reaches the outermost periphery of disc, the operation does not stop. The LCD display indicates the playback past time as in case of ordinary CD playback.



When the following operation buttons are pressed in this sate, the operation is executed as follows.

"POWER" .... The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
"FF/FWD" .... The pickup slides toward the outer periphery while this button is held down.
"REW/REV" .... The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.
"PLAY" .... Invalid
"STOP" .... Return to step 1
"FUNCTION" .... Shift to step 6
"BAND" .... Shift to step 7

*If the focus is disturbed, the process returns to step 1.

Other cautions

- TOC IL is not executed in the test mode.
- As for button operations other than those shown above, only the sound volume operation (with JOG) is accepted

3. Tuner Test Mode (TEST 2)

1. Outline of tuner (radio) test mode

   The tuner test mode is intended to store the adjustment and measurement frequencies in the preset memory CH without frequency setting by adjusting personnel when the tuner section is adjusted in the production line.

2. Details of tuner test mode

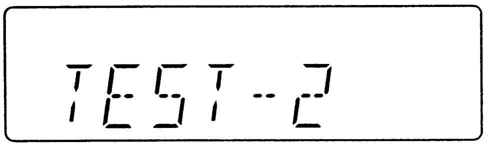
   When the power is turned on by using the "POWER" button while the "FF/FWD" and "MEMORY/SET" buttons are held down in POWER OFF state, the frequency for adjustment and measurement of destination specified by the AREA terminal is preset and stored in the preset memory CH. However, Ordinary 1 and Ordinary 2 are set to the designation (destination selected by SPAN switching operation) set when the test mode is set. (As for frequencies to be preset and stored for each destination, refer to item 3.)

   The tuner test mode is started from preset No.1.

   The operations of test mode are identical with the ordinary operations of TUNER function. However, FUNCTION switching is invalid.

   Since it is necessary to discard the content of preset memory when the tuner test mode is ended, "0000" or "1111" bits are written in the memory to be checked in case of memory check (in case of initial setting) so that memory abnormality is detected in case of initial setting so as to ensure memory initialization.

   When the tuner test mode is turned on, the following indication lights for one second.



- The TUNER TEST2 mode is set as a result of >> + MEMORY + POWER. -> IF AC is set to OFF in the TEST2 mode, the initial state is restored.

↓

When POWER is set to OFF, the memory of TEST2 mode is protected.
When the power is turned on again, the ordinary operation is enabled while the data is stored in the memory (besides TUNER).

↓

If AC OFF state is maintained in this state for about 1/2 day, start is executed in the initial state.

- To clear the whole memory, insert the AC cord, holding down MEMORY + BASS/TREBLE.

3. Preset frequencies for various destinations (random preset memory)

CH	BAND	Europe 2, 4
1	FM STEREO	FM 87.50 MHz
2		FM108.00 MHz
3		FM 98.00 MHz
4		FM 90.00 MHz
5		FM106.00 MHz
6	AM	AM 522 kHz
7		AM1620 kHz
8		AM 990 kHz
9		AM 603 kHz
10		AM1404 kHz
11	LW	
12		
13		
14		
15		

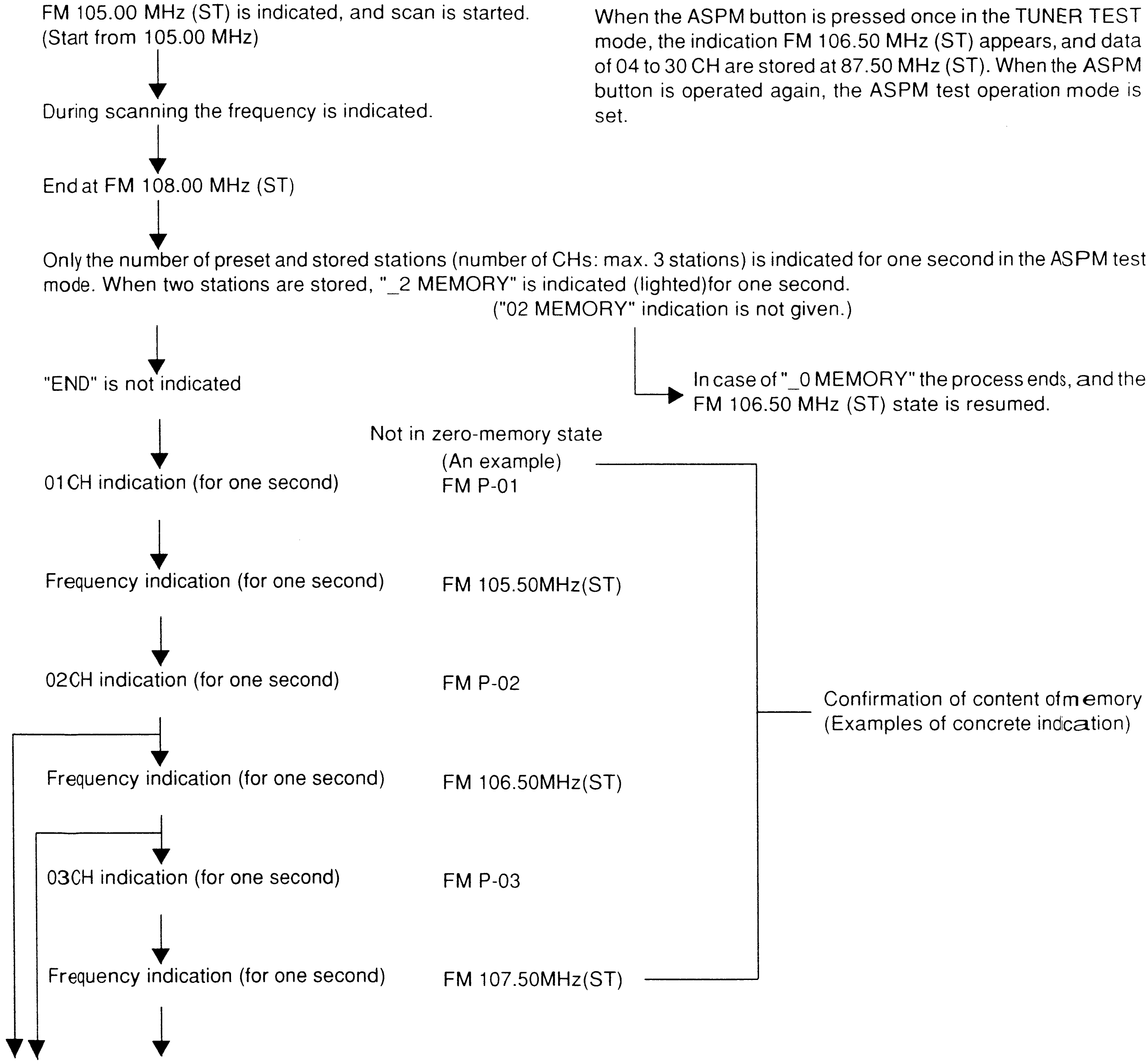
CH	BAND	Europe 2, 4
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26	FM MONO	FM106.00 MHz
27		FM 90.00 MHz
28		FM 98.00 MHz
29		FM108.00 MHz
30		FM 87.50 MHz

- The hatched sections of the table are not stored in memory.

4. ASPM TEST Mode (RDS circuit is only for XL-560H/570H)
When the ASPM button is pressed, the test mode is set. It starts up at FM 106.50 MHz. (ST mode)

Data of 27 CH of 04 to 30 CH are all stored at FM 87.50 MHz (ST).
01 to 03CH are kept empty (If data of 3 CH are stored, max. 30 CH is filled.)
When the ASPM button is operated in the TEST mode 3, the preset data is cleared (overwrite).

A) Operation with ASPM button
Press the "ASPM" button or hold it down. (Any button other than ASPM button cancels the ASPM test mode.)



When the ASPM button is pressed once in the TUNER TEST mode, the indication FM 106.50 MHz (ST) appears, and data of 04 to 30 CH are stored at 87.50 MHz (ST). When the ASPM button is operated again, the ASPM test operation mode is set.

FM 105.00 MHz (ST) is indicated, and scan is started.
(Start from 105.00 MHz)

During scanning the frequency is indicated.

End at FM 108.00 MHz (ST)

Only the number of preset and stored stations (number of CHs: max. 3 stations) is indicated for one second in the ASPM test mode. When two stations are stored, "_2 MEMORY" is indicated (lighted)for one second.
("02 MEMORY" indication is not given.)

In case of "_0 MEMORY" the process ends, and the FM 106.50 MHz (ST) state is resumed.

"END" is not indicated

Not in zero-memory state

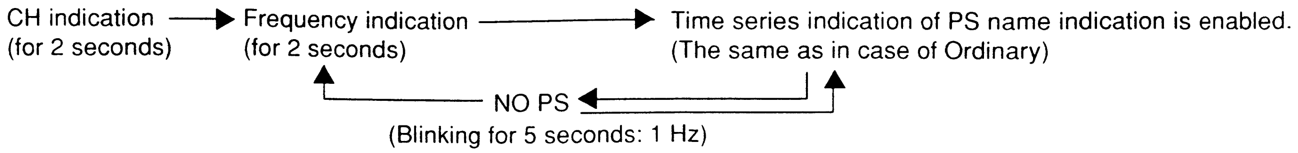
	(An example)
01CH indication (for one second)	FM P-01
Frequency indication (for one second)	FM 105.50MHz(ST)
02CH indication (for one second)	FM P-02
Frequency indication (for one second)	FM 106.50MHz(ST)
03CH indication (for one second)	FM P-03
Frequency indication (for one second)	FM 107.50MHz(ST)

Confirmation of content ofmemory
(Examples of concrete indication)

After indication of continuous time series for one second the indication of FM 106.50 MHz (ST) is restored.
(The preset button is not pressed. The time series is indicated automatically, and the content of memory is indicated.)

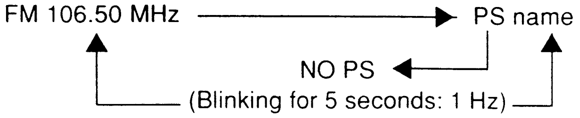
* PS name is not indicated (while the content of memory is checked)
* If only 1 CH data is stored, FM P-01 -> FM 106.00 MHz -> FM 106.50 MHz (ST)
(An example) (1 sec) (1 sec) (ST) End indication

* When the "PRESET UP" button or "PRESET DOWN" button is pressed after completion, the following indication appears.


CH indication
(for 2 seconds)
Frequency indication
(for 2 seconds)
Time series indication of PS name indication is enabled.
(The same as in case of Ordinary)
NO PS
(Blinking for 5 seconds: 1 Hz)

Note: If PS is fixed after the frequency indication is resumed, the PS name indication is restored.

* If signal exists at 106.50 MHz, the following indication appears.


FM 106.50 MHz
PS name
NO PS
(Blinking for 5 seconds: 1 Hz)

When the PS data is given in case of NO PS indication, the PS name indication is restored.

Note: If PS is fixed after the frequency indication is resumed, the PS name indication is restored.

In case of memory storage with ASPM, for example, if RDS station 107.50 MHz has the PI code (the same as that of RDS station 105.50 MHz) and VSM is greater than 105.50 MHz (PR-01), data is overwritten on 105.5 MHz which is contained in "PR-01". (Frequency is changed to 107.50 MHz.)
If VSM is equal, previously stored 105.50 MHz remains.

When RDS station is stored in the test mode, the 2-second blinking of preset No. is not performed so as to save the production line test time. ("RDS" lighting is performed.)

Note: RDS operation is performed in FM MONO state. However, in case of ASPM, ASPM scan is performed after BAND is changed from FM MONO to FM STEREO.

Note: When the ►II (PLAY) button is pressed in TEST 2 mode, it is possible to check the sate of IF count. However, this function is for designer. It is not necessary for other sections.

B) Cautions concerning the ASPM test mode

a) Cancel: When the "ASPM" button is pressed again during operation after it was first pressed in the test mode, the ASPM test mode is canceled (interrupted), and the initial state FM 106.50 MHz (ST) indication is restored.
(To check the data which was preset and stored until interruption, use the preset UP/DOWN button. (JOG UP/DOWN is also available after JOG mode button operation.)
wing indication appears.

b) The ASPM test mode is started in FM stereo state (FM 106.50 MHz ST). If any button other than ASPM button is pressed even only once after it is started, it becomes invalid, and the ASPM test mode becomes inoperable.
Invalid: The Ordinary mode is set while 4 to 30CH data remain in memory (or 1 to 30 CH MAX data remain in memory).

The "ASPM" button can be repeatedly operated until 01CH to 03CH is filled (up to 3 stations in memory).
The number of stored stations -> Channel No. -> Frequency -> FM 106.50 MHz (ST) is indicated.
(1 second) (1 second) (1 second) (Initial state)

Up to 3 stations (1 to 3CH) can be indicated. This indication is given only in the ASPM test mode. In other mode (not in ASPM test mode) the number of stored stations -> END is indicated

c) Broadcast (without PI code) which is not RDS is not preset and stored in memory.
When the ASPM mode is set, the "MEMORY/SET" button cannot be operated (the test mode is canceled).
Operation is possible after ASPM test mode operation.

d) Scan frequency: 105.00 MHz -> 108.00 MHz
Data are stored in memory so that the PI code is not duplicated (by seeing the PI code and VSM (S meter value). When the PI code is duplicated, both VSM (S meter value) are compared. The greater one is stored in memory but the smaller one is discarded.
For the stations having the same PI code, only one station having the highest electric field intensity is stored, and the memory is refilled. The channels which can be preset in the ASPM test mode are 01 to 03CH. If 3 stations are stored, 30 CH are filled.
For the stations having the same electric field intensity, the former (preceding station) is stored.

e) Signal of already stored same frequency is not stored. (The previously stored data is kept.)

f) The order of preset memory is 01CH -> 02CH -> 03CH.

g) When 01 to 03CH were all used, scan is aborted at the frequency at which filling occurred, and the following indication appears.

Number of stored stations -> Indication of stored channel -> Indication of frequency -> Return to initial FM 106.50 MHz (ST)
(1 second) (1 second) (1 second)

In this period up to 3 stations are continuously indicated (1 to 3 CH).

h) If even one station could not be preset and stored in the APMS mode, "_0MEMORY" is indicated after scanning, and then FM 106.50 MHz (ST) indication is restored. (The first digit is space.)
("_0MEMORY" is indicated in the test mode.)

i) When the "ASPM" button is pressed after three stations are stored (after full-memory of 30 stations), "ASPM" blinks for 2 seconds, and then FM 106.50 MHz (ST) indication is restored without ASPM scanning. (RDS automatic lighting)
(In case of ASPM button operation in full memory state)

j) After completion of specific operation FM 106.50 MHz (ST) indication is restored.

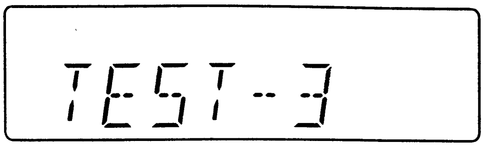
k) Test mode
Use of only the function button is inhibited.

l) The first channel to be called (when data is stored in the ASPM mode) is 01CH.

m) After start-up in the ASPM test mode the ASPM key is valid even when it is pressed many times. The test mode is kept.
If three stations are stored (1 to 3CH), full-memory state occurs.
If the ASPM button is pressed after occurrence of full-memory state, the same operation as that described in item i) is performed.

4. Electronic volume Test Mode (TEST 3)

When the test mode is set, the following indication lights for one second.



When this mode is set, BASS/TREBLE is set to 0 (0 dB) and SURROUND mode is set to off, and start-up function is set to CD when volume is -14 dB (STEP 17). The button operations in the test mode are the same as those of ordinary operation excepting sound volume UP/DOWN.

(1) The indication is the same as that of ordinary operation excepting test mode setting.

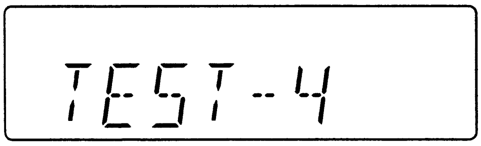
(2) The sound volume control with the sound volume UP/DOWN button is only the following 3 steps unlike the ordinary state.

Volume- ∞ (STEP 0) <-> Volume-14 dB (STEP 23) <-> Volume-0 (STEP 30)

(3) BASS/TREBLE and SURROUND are switched when button operation is performed.

5. Timer test Mode (TEST 4)

When the test mode is set, the following indication lights for one second.



The current time and timer time are set in the following procedure to perform the timer playback.

1. Set the current time to 1:00, set the timer to ON time 1:02, set the function to Tape, and set volume STEP 8. One minute is counted as one second, and the timer playback operation is performed. The fade-in (when playback is started) is executed at a rate of one step for 0.5 sec. After completion of fade-in the fade-out is executed at a rate of one step for 0.5 sec (WAIT 1 sec inserted). After completion of fade-out the power is turned off (after WAIT 1 sec), and the mode is changed to the standby mode.

The indication during operation is the same as that of ordinary timer operation.

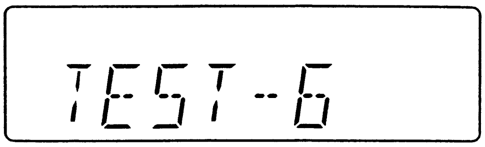
6. LCD Test Mode (TEST 5)

When the LCD test mode is set, all the LCD segments are lighted. After that the indication is changed as follows according to the "PLAY" button input.

→ Lighting of all segments → Lighting of odd segments → Lighting of even segments

7. Key input diagnosis Test Mode (TEST 6)

When the test mode is set, the following indication appears.



This test mode is intended to check whether all the main unit buttons can be detected. Accordingly, in this test mode checking as to whether the "POWER" button was pressed after all the buttons shown below were pressed is performed. If the result is OK, OK is indicated. Even any one of keys was not pressed, an error is indicated. In case of OK termination or error termination exit from this mode occurs when the "POWER" button is pressed next time, and the standby mode is set.

All the models using this microcomputer do not use the same buttons. Some models do not have specific buttons. Accordingly, the input of the following buttons is detected by using the combination of buttons to be pressed together when this mode is turned on.

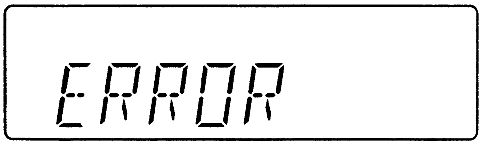
The button pressing order is not specified. Checking as to whether all the buttons were pressed is executed.

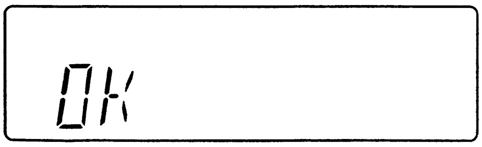
1. In case of "FF/FWD" + "REC PAUSE" (XL-560E/570E Only)
   Since RDS and SURROUND are not provided, the following 11 buttons are detected as all buttons.
   PLAY, JOG MODE, BAND, BASS/TREBLE, FUNCTION, MEMORY/SET, REC PAUSE, REW, FF, STOP, CLOCK/TIMER/SLEEP

2. In case of "FUNCTION" + "RDS PTY-TP" (XL-560H/570H Only)
   Since SURROUND and RDS are provided, the following 16 buttons are detected as all buttons.
   PLAY, JOG MODE, BAND, BASS/TREBLE, FUNCTION, MEMORY/SET, REC PAUSE, REW, FF, STOP, CLOCK/TIMER/SLEEP, PTY-TI, EON, APMS, DISPLAY, SURROUND

(RDS circuit is only for XL-560H/570H)

The OK/NG indication of test result is as follows.





NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with "Fusible" is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     < > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with "⚠" ([— — —]) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW700	JOG DIAL	ON—OFF
SW701	CD EJECT	ON—OFF
SW702	VOLUME/JOG DIAL	ON—OFF
SW703	PLAY	ON—OFF
SW704	STOP	ON—OFF
SW705	FUNCTION	ON—OFF
SW706	BAND	ON—OFF
SW707	MEMORY/SET	ON—OFF
SW708	RECORD PAUSE	ON—OFF
SW710	FAST FORWARD	ON—OFF
SW711	REWIND	ON—OFF
SW712	DISPLAY MODE [XL-560H/570H ONLY]	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW713	ASPM [XL-560H/570H ONLY]	ON—OFF
SW714	EON [XL-560H/570H ONLY]	ON—OFF
SW715	PROGRAMME TYPE/ TRAFFIC INFORMATION [XL-560H/570H ONLY]	ON—OFF
SW716	SURROUND [XL-560H/570H ONLY]	ON—OFF
SW717	BASS/TREBLE	ON—OFF
SW718	ON/STAND-BY	ON—OFF
SW719	CLOCK/TIMER/SLEEP	ON—OFF
SW801	PICKUP IN	ON—OFF
SW901	FOOL PROOF	ON—OFF
SW902	CAM	ON—OFF

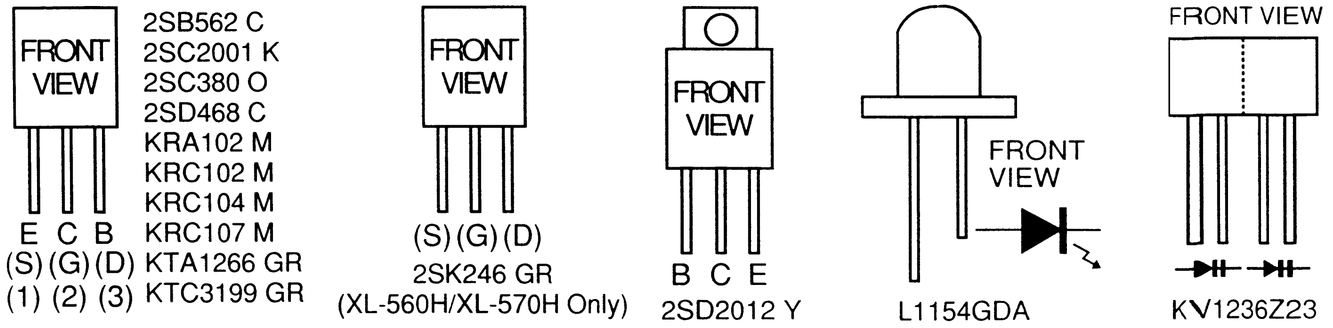


Figure 21 TYPES OF TRANSISTOR AND LED

MEASURES TO BE TAKEN TO CHANGE THE MICROCOMPUTERS, STARTING FROM SERIAL No. 905xxxxx

The system microcomputers and peripheral parts will be changed as follows, starting from 1999 Serial No. 905xxxxx.
When microcomputers from the 1999 Serial No. 904xxxxx are repaired, special attention should be paid so that they are changed according to the following instructions.
(There is no problem in using the NEW microcomputers without changing the peripheral circuits.)

		Serial No. (904xxxxx)	Serial No. (905xxxxx~)
REF. NO	DESCRIPTION	PARTS CODE	PARTS CODE
IC701	System Microcomputer	RH-iX0014SJZZ	RH-iX0021SJZZ
Q501,502 (XL-560H/570H Only)	Digital, NPN, KRC102 M	VSKRC102M//-1	Abolition
C707	4.7µF, 25V, Electrolytic	RC-GZA475AF1E	Abolition
R501 (XL-560H/570H Only)	10 kohm, 1/10W	VRS-TV2AB103J	Abolition
R909	1 kohm, 1/6W	VRD-ST2CD102J	Jumper

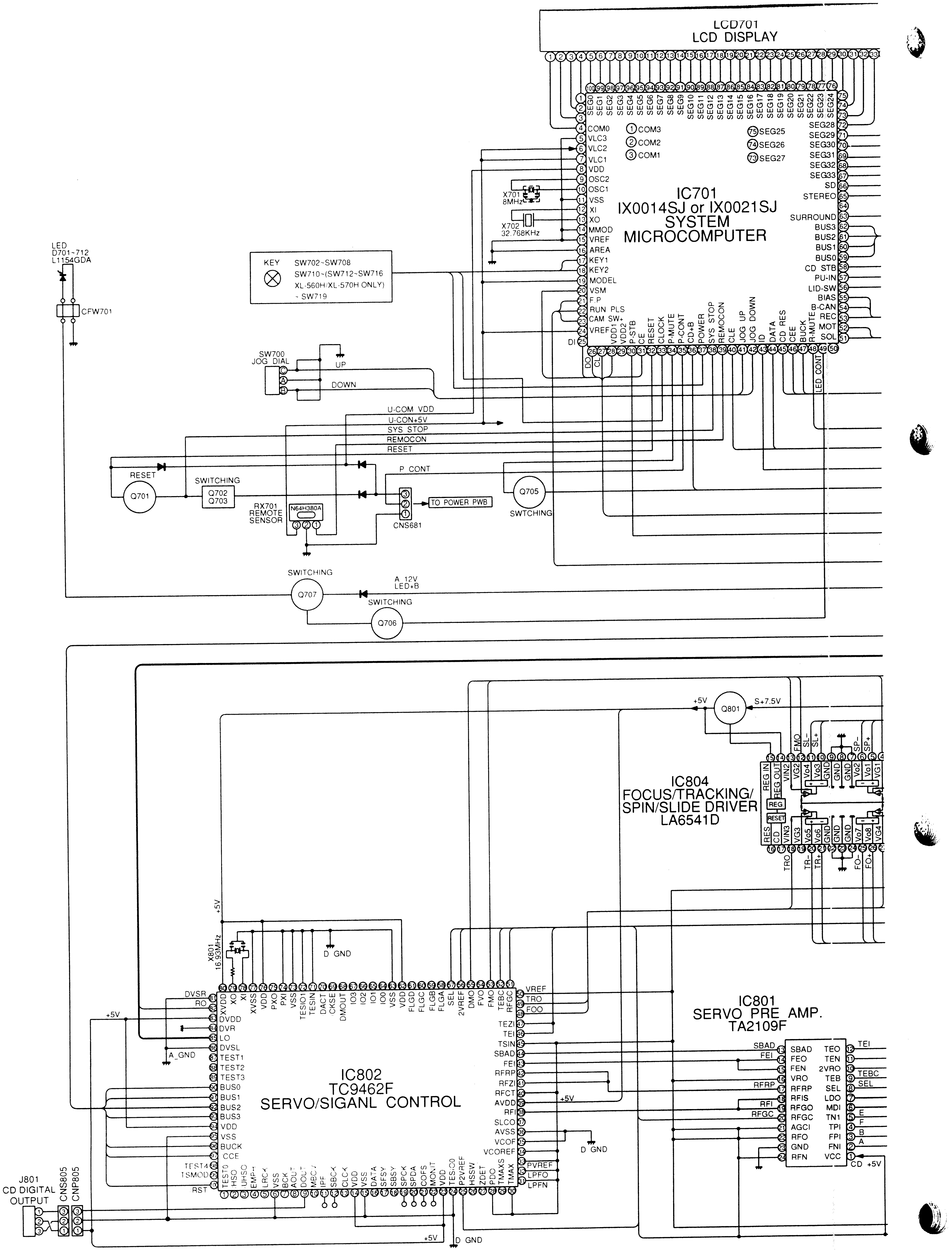

LCD701
LCD DISPLAY
IC701
IX0014SJ or IX0021SJ
SYSTEM
MICROCOMPUTER
COM0
VLC3
VLC2
VLC1
VDD
OSC2
OSC1
VSS
XI
XO
MMOD
VREF
AREA
KEY1
KEY2
MODEL
VSM
F.P
RUN PLS
CAM SW+
VREF
COM3
COM2
COM1
SEG25
SEG26
SEG27
SEG28
SEG29
SEG30
SEG31
SEG32
SEG33
SD
STEREO
SURROUND
BUS3
BUS2
BUS1
BUS0
CD STB
PU-IN
LID-SW
BIAS
B-CAN
REC
MOT
SOL
X701 8MHz
X702 32.768KHz
LED D701~712 L1154GDA
CFW701
KEY
SW702~SW708
SW710~(SW712~SW716 XL-560H/XL-570H ONLY) ~SW719
SW700 JOG DIAL
UP
DOWN
U-COM VDD
U-CON+5V
SYS STOP
REMOCON
RESET
P CONT
RESET
Q701
SWITCHING
Q702 Q703
RX701 REMOTE SENSOR
N64H380A
CNS681
TO POWER PWB
Q705
SWTCHING
SWITCHING
Q707
A 12V LED+B
SWITCHING
Q706
+5V
Q801
S+7.5V
IC804
FOCUS/TRACKING/
SPIN/SLIDE DRIVER
LA6541D
REG
RESET
TRO
TR-
TR+
FO-
FO+
FMO
SL-
SL+
SP-
SP+
X801 16.93MHz
D GND
IC802
TC9462F
SERVO/SIGANL CONTROL
DVSR
RO
DVDD
DVR
LO
DVSL
A_GND
TEST1
TEST2
TEST3
BUS0
BUS1
BUS2
BUS3
VDD
VSS
BUCK
CCE
TEST4
TSMOD
RST
VREF
TRO
FOO
TEZI
TEI
TSIN
SBAD
FEI
RFRP
RFZI
RFCT
AVDD
RFI
SLCO
AVSS
VCOF
VCOREF
PVREF
LPFO
LPFN
IC801
SERVO PRE AMP.
TA2109F
SBAD
FEO
FEN
VRO
RFRP
RFIS
RFGO
RFGC
AGCI
RFO
GND
RFN
TEO
TEN
2VRO
TEB
SEL
LDO
MDI
TN1
TPI
FPI
FNI
VCC
TEI
TEBC
SEL
E
F
B
A
CD +5V
J801 CD DIGITAL OUTPUT
CNS805
CNP805
+5V
D GND

Figure 22 BLOCK DIAGRAM (1/4)

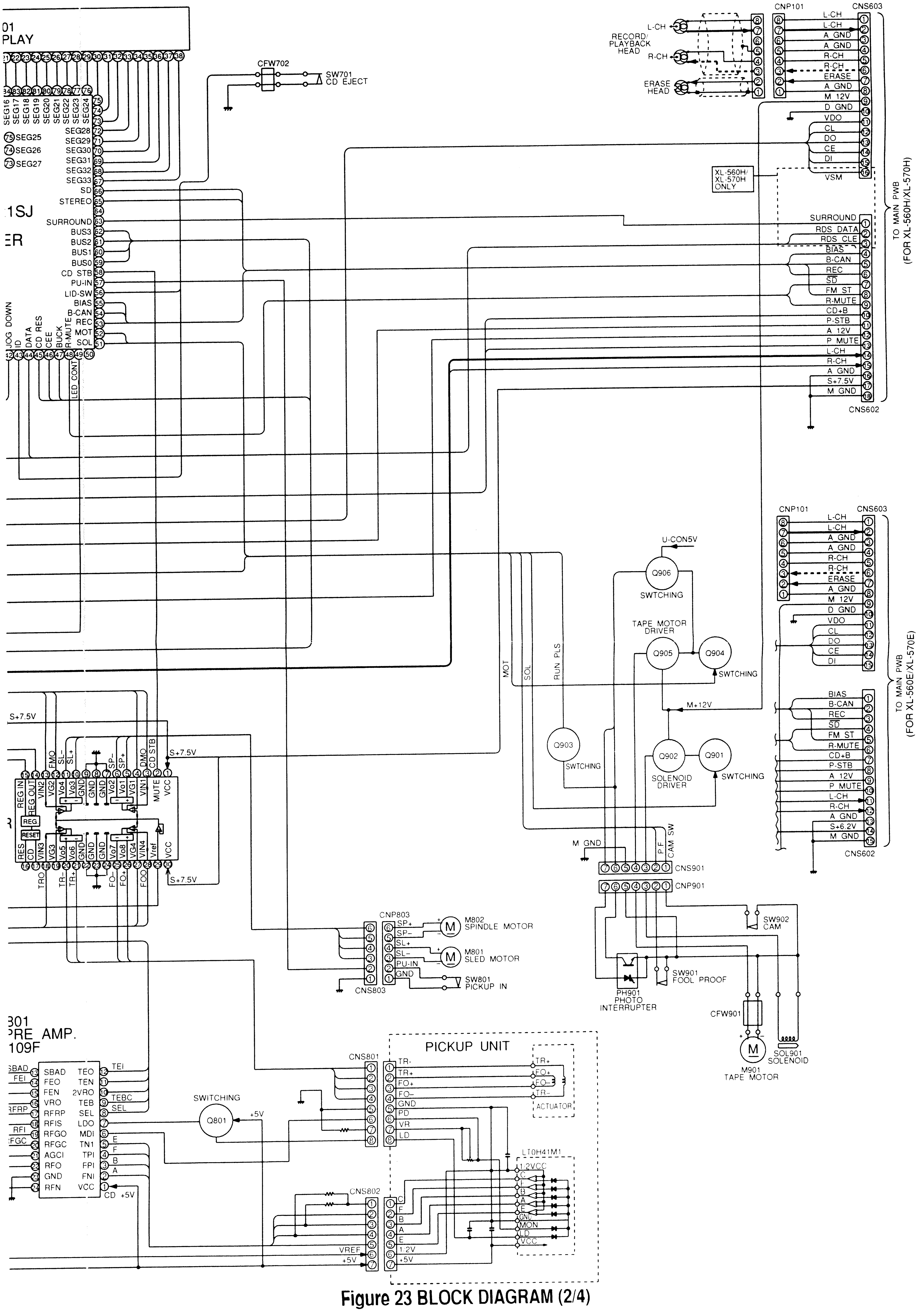

01
PLAY
CFW702
SW701
CD EJECT
SEG16
SEG17
SEG18
SEG19
SEG20
SEG21
SEG22
SEG23
SEG24
SEG25
SEG26
SEG27
SEG28
SEG29
SEG30
SEG31
SEG32
SEG33
SD
STEREO
1SJ
SURROUND
ER
BUS3
BUS2
BUS1
BUS0
CD STB
PU-IN
LID-SW
BIAS
B-CAN
REC
MOT
SOL
JOG DOWN
ID
DATA
CD RES
CEE
BUCK
R-MUTE
LED CONT
RECORD/
PLAYBACK
HEAD
L-CH
R-CH
ERASE
HEAD
CNP101
CNS603
L-CH
A GND
R-CH
ERASE
M 12V
D GND
VDO
CL
DO
CE
DI
VSM
XL-560H/
XL-570H
ONLY
SURROUND
RDS DATA
RDS CLE
BIAS
B-CAN
REC
SD
FM ST
R-MUTE
CD+B
P-STB
A 12V
P MUTE
S+7.5V
M GND
CNS602
TO MAIN PWB
(FOR XL-560H/XL-570H)
U-CON5V
Q906
SWTCHING
TAPE MOTOR
DRIVER
Q905
Q904
SWTCHING
MOT
SOL
RUN PLS
M+12V
Q903
SWTCHING
Q902
Q901
SOLENOID
DRIVER
SWTCHING
S+6.2V
TO MAIN PWB
(FOR XL-560E/XL-570E)
S+7.5V
FMO
SL-
SL+
SP-
SP+
DMO
CD STB
REG IN
REG OUT
VIN2
VG2
Vo4
Vo3
GND
Vo2
Vo1
VG1
VIN1
MUTE
VCC
REG
RESET
RES
CD
VIN3
VG3
Vo5
Vo6
Vo7
Vo8
VG4
VIN4
Vref
TRO
TR-
TR+
FO-
FO+
FOO
M GND
P.F
CAM SW
CNS901
CNP901
SW902
CAM
CNP803
M802
SPINDLE MOTOR
M801
SLED MOTOR
PU-IN
GND
SW801
PICKUP IN
CNS803
PH901
PHOTO
INTERRUPTER
SW901
FOOL PROOF
CFW901
M901
TAPE MOTOR
SOL901
SOLENOID
301
PRE AMP.
109F
SBAD
FEI
FEO
FEN
VRO
RFRP
RFIS
RFGO
RFGC
AGCI
RFO
GND
RFN
TEO
TEN
2VRO
TEB
SEL
LDO
MDI
TN1
TPI
FPI
FNI
VCC
TEI
TEBC
E
F
B
A
CD +5V
SWITCHING
Q801
+5V
CNS801
PICKUP UNIT
TR-
TR+
FO+
FO-
PD
VR
LD
ACTUATOR
LT0H41M1
1.2VCC
C
MON
CNS802
VREF
1.2V

Figure 23 BLOCK DIAGRAM (2/4)

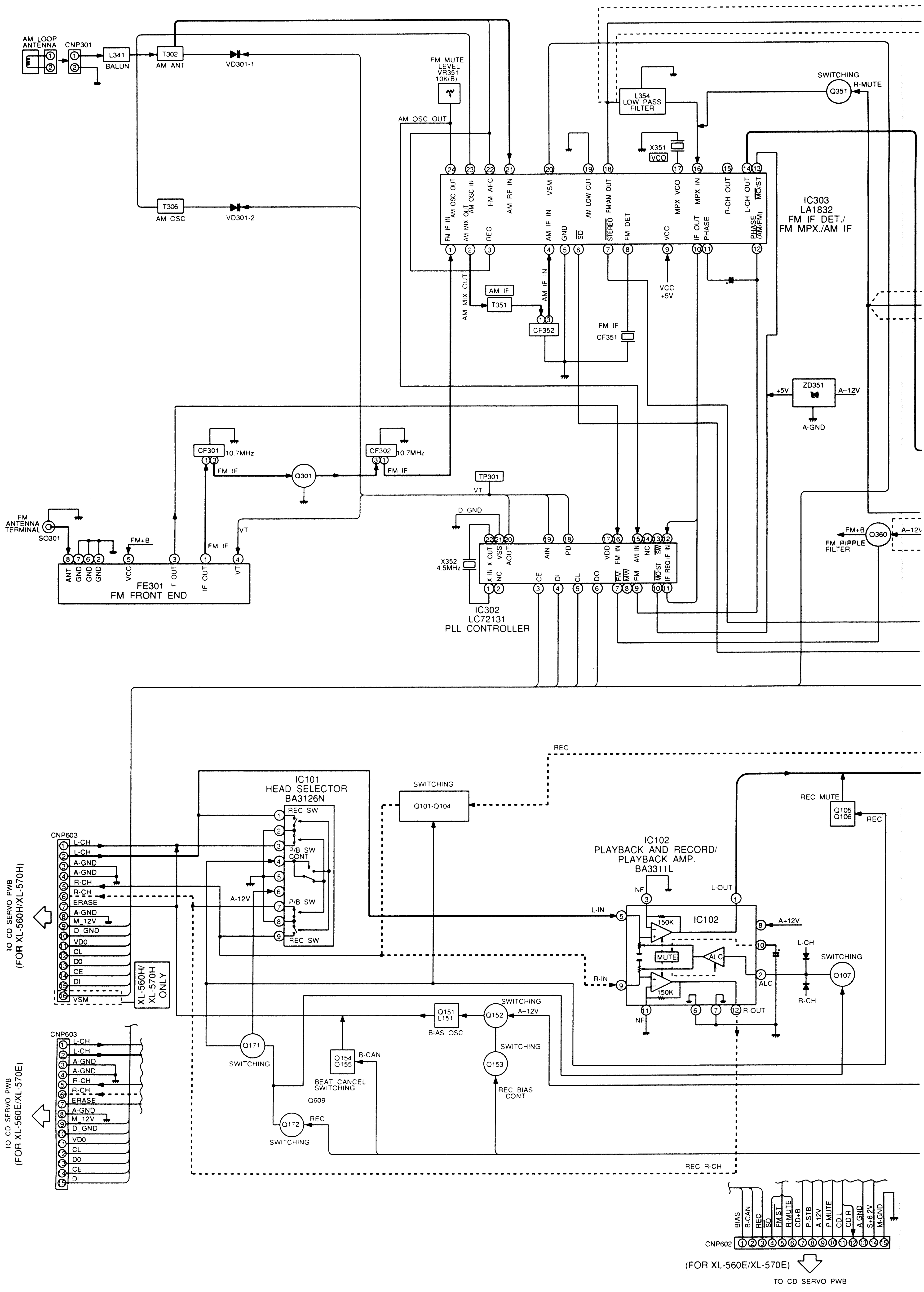

AM LOOP ANTENNA
CNP301
L341
BALUN
T302
AM ANT
VD301-1
T306
AM OSC
VD301-2
FM MUTE LEVEL VR351 10K(B)
AM OSC OUT
L354 LOW PASS FILTER
X351
VCO
SWITCHING
Q351
R-MUTE
IC303
LA1832
FM IF DET./
FM MPX./AM IF
FM IF IN
AM OSC OUT
AM MIX OUT
AM OSC IN
FM AFC
REG
AM RF IN
AM IF IN
VSM
GND
SD
AM LOW CUT
STEREO
FM/AM OUT
FM DET
VCC
MPX VCO
IF OUT
PHASE
MPX IN
R-CH OUT
L-CH OUT
PHASE (AM/FM)
MO/ST
AM MIX OUT
AM IF
T351
AM IF IN
CF352
VCC
+5V
FM IF
CF351
ZD351
+5V
A-12V
A-GND
CF301
10.7MHz
FM IF
Q301
CF302
10.7MHz
FM IF
TP301
VT
D GND
FM ANTENNA TERMINAL
SO301
FM+B
FM IF
VT
ANT
GND
GND
GND
VCC
F OUT
IF OUT
VT
FE301
FM FRONT END
X352
4.5MHz
X IN
NC
X OUT
VSS
AOUT
AIN
PD
CE
DI
CL
DO
VDD
FM IN
FM/MW
AM IN
NC
FM
MO/ST
SW
IF REQ
IF IN
IC302
LC72131
PLL CONTROLLER
FM+B
Q360
A-12V
FM RIPPLE FILTER
REC
IC101
HEAD SELECTOR
BA3126N
REC SW
P/B SW
CONT
P/B SW
REC SW
A-12V
SWITCHING
Q101-Q104
REC MUTE
Q105
Q106
REC
IC102
PLAYBACK AND RECORD/
PLAYBACK AMP.
BA3311L
NF
L-OUT
L-IN
150K
IC102
A+12V
MUTE
ALC
L-CH
SWITCHING
Q107
R-IN
150K
ALC
R-CH
NF
R-OUT
CNP603
L-CH
L-CH
A-GND
A-GND
R-CH
R-CH
ERASE
A-GND
M_12V
D_GND
VDO
CL
DO
CE
DI
VSM
XL-560H/
XL-570H
ONLY
TO CD SERVO PWB
(FOR XL-560H/XL-570H)
Q151
L151
BIAS OSC
SWITCHING
Q152
A-12V
SWITCHING
Q153
REC BIAS CONT
Q171
SWITCHING
Q154
Q155
B-CAN
BEAT CANCEL SWITCHING
Q609
Q172
REC
SWITCHING
CNP603
L-CH
L-CH
A-GND
A-GND
R-CH
R-CH
ERASE
A-GND
M_12V
D_GND
VDO
CL
DO
CE
DI
TO CD SERVO PWB
(FOR XL-560E/XL-570E)
REC R-CH
BIAS
B-CAN
REC
SD
FM ST
R-MUTE
CD+B
P.STB
A 12V
P MUTE
CD L
CD R
A GND
S+6.2V
M-GND
CNP602
(FOR XL-560E/XL-570E)
TO CD SERVO PWB

Figure 24 BLOCK DIAGRAM (3/4)

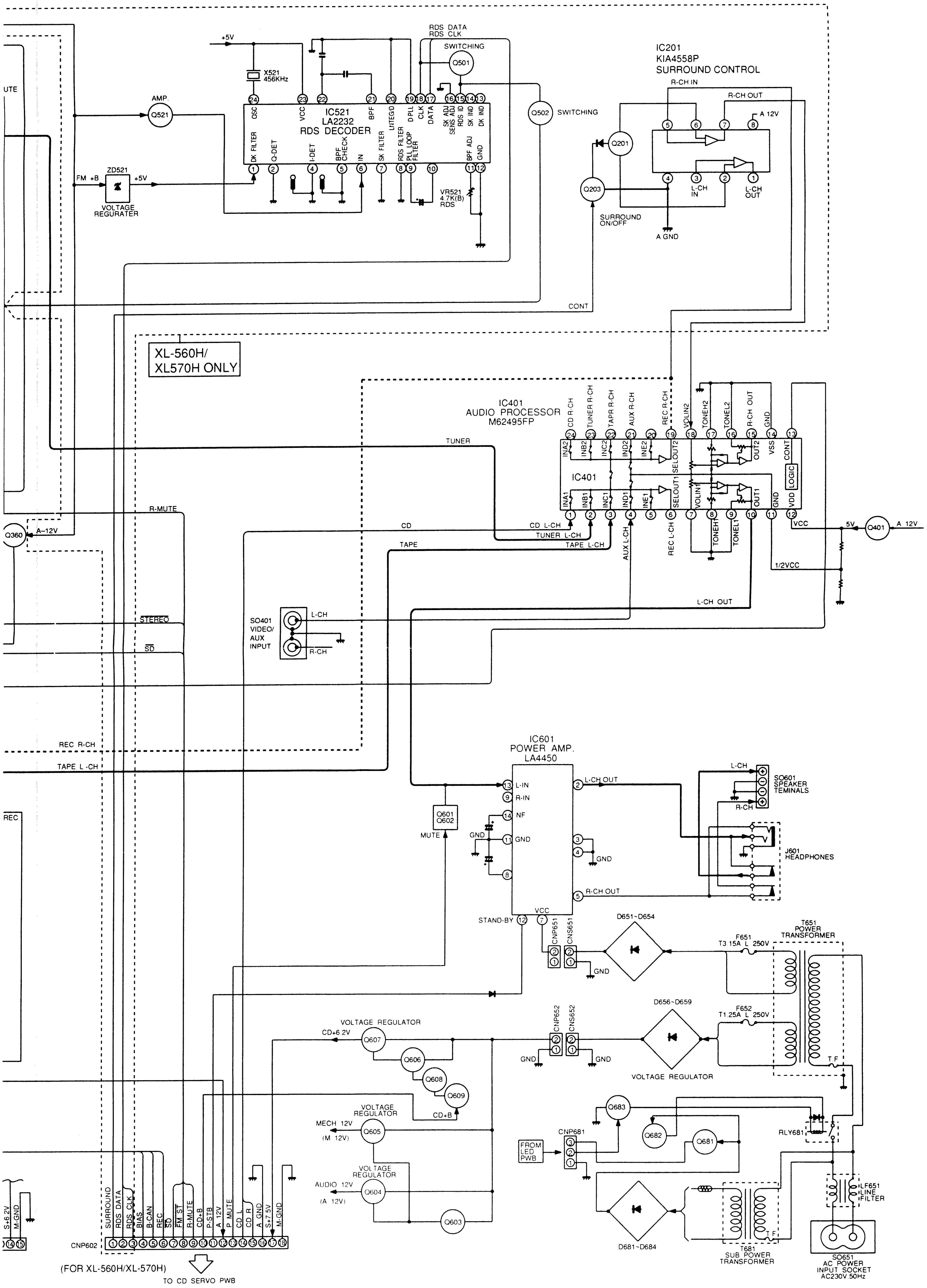
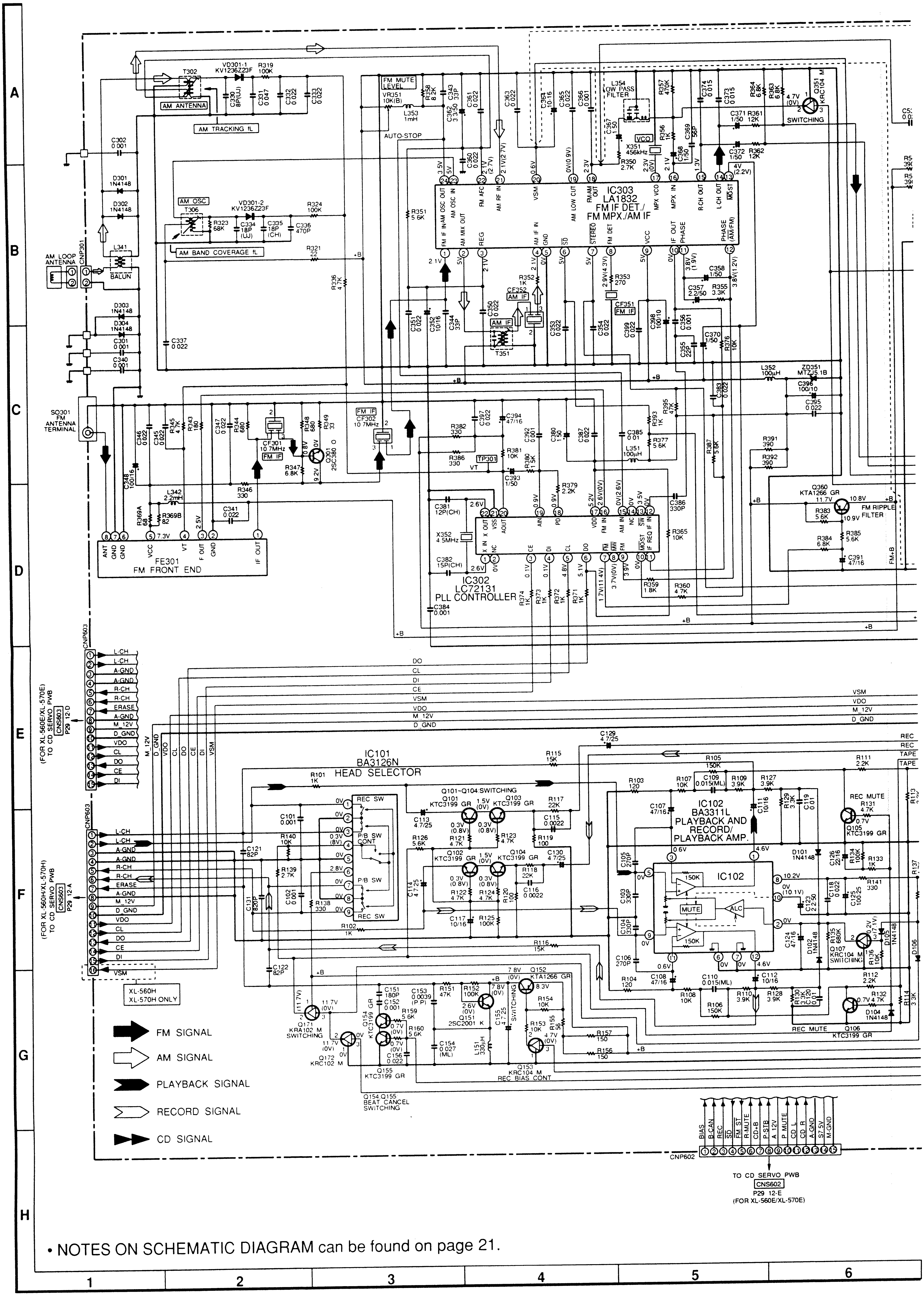
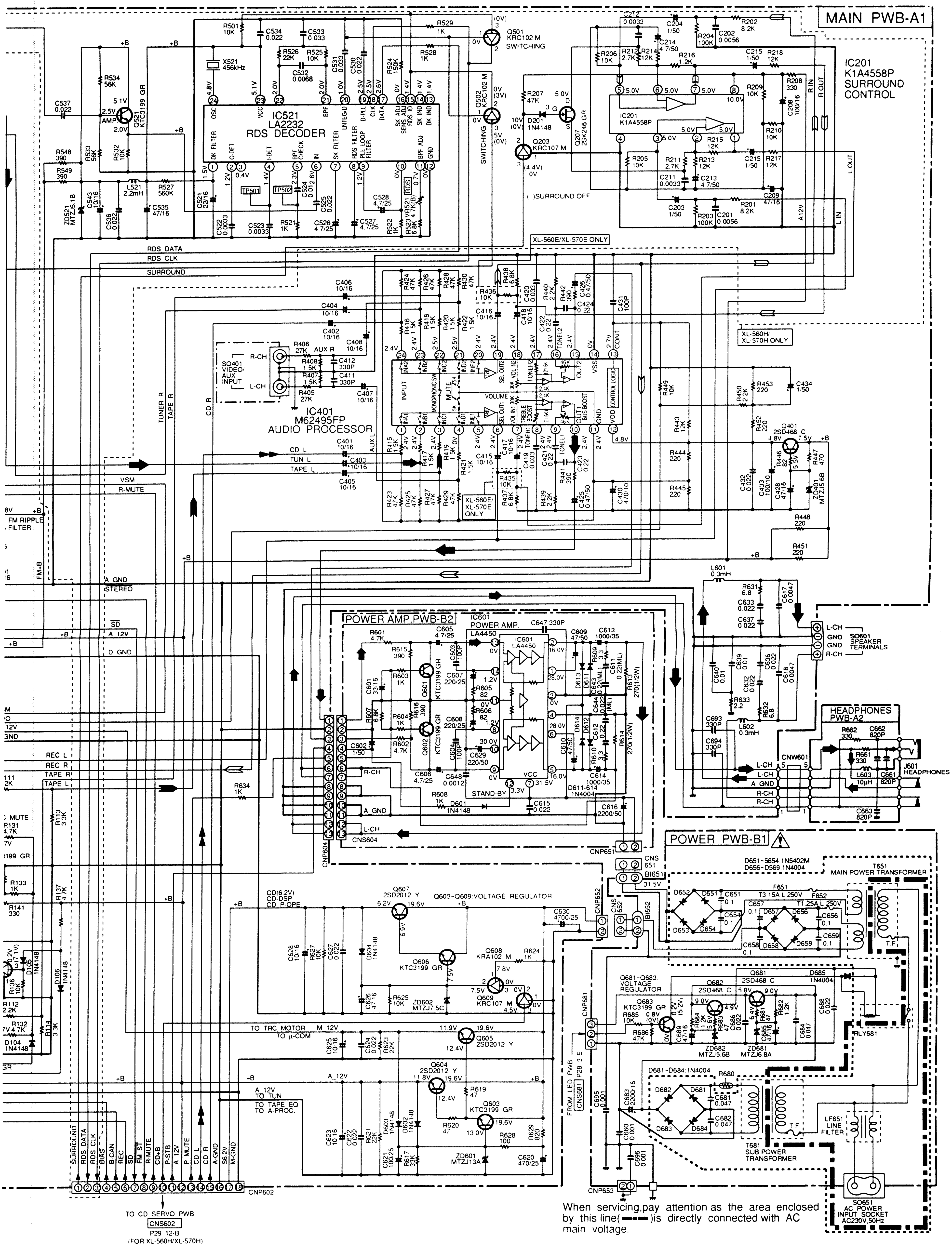

UTE
+5V
RDS DATA
RDS CLK
SWITCHING
Q501
X521
456KHz
AMP
Q521
IC521
LA2232
RDS DECODER
OSC
VCC
BPF
LI/TEGD
D.PLL
CLK
DATA
SK ADJ
SENS ADJ
RDS ID
SK IND
DK IND
DK FILTER
Q-DET
I-DET
BPF CHECK
IN
SK FILTER
RDS FILTER
PLL LOOP FILTER
BPF ADJ
GND
VR521
4.7K(B)
RDS
Q502
SWITCHING
ZD521
FM +B
+5V
VOLTAGE REGURATER
IC201
KIA4558P
SURROUND CONTROL
R-CH IN
R-CH OUT
A 12V
Q201
Q203
L-CH IN
L-CH OUT
SURROUND ON/OFF
A GND
CONT
XL-560H/
XL570H ONLY
IC401
AUDIO PROCESSOR
M62495FP
CD R-CH
TUNER R-CH
TAPR R-CH
AUX R-CH
REC R-CH
VOLIN2
TONEH2
TONEL2
R-CH OUT
GND
INA2
INB2
INC2
IND2
INE2
SELOUT2
OUT2
VSS
CONT
LOGIC
IC401
INA1
INB1
INC1
IND1
INE1
SELOUT1
VOLIN1
OUT1
VDD
TONEH1
TONEL1
REC L-CH
AUX L-CH
TUNER
R-MUTE
Q360
A-12V
CD
CD L-CH
TUNER L-CH
TAPE
TAPE L-CH
VCC
5V
Q401
A 12V
1/2VCC
L-CH OUT
STEREO
SD
SO401
VIDEO/
AUX
INPUT
L-CH
R-CH
REC R-CH
TAPE L-CH
REC
IC601
POWER AMP.
LA4450
L-IN
R-IN
NF
GND
L-CH OUT
R-CH OUT
VCC
STAND-BY
Q601
Q602
MUTE
L-CH
R-CH
SO601
SPEAKER
TEMINALS
J601
HEADPHONES
D651~D654
CNP651
CNS651
GND
F651
T3.15A L 250V
T651
POWER
TRANSFORMER
D656~D659
F652
T1.25A L 250V
CNP652
CNS652
GND
VOLTAGE REGULATOR
T.F
VOLTAGE REGULATOR
CD+6.2V
Q607
Q606
Q608
Q609
CD+B
VOLTAGE
REGULATOR
MECH 12V
(M 12V)
Q605
VOLTAGE
REGULATOR
AUDIO 12V
(A 12V)
Q604
Q603
Q683
Q682
Q681
RLY681
CNP681
FROM
LED
PWB
LF651
LINE
FILTER
D681~D684
T681
SUB POWER
TRANSFORMER
T.F
SO651
AC POWER
INPUT SOCKET
AC230V 50Hz
S+6.2V
M-GND
SURROUND
RDS DATA
RDS CLK
BIAS
B-CAN
REC
SD
FM ST
R-MUTE
CD+B
P-STB
A 12V
P MUTE
CD L
CD R
A GND
S+7.5V
M-GND
CNP602
(FOR XL-560H/XL-570H)
TO CD SERVO PWB

Figure 25 BLOCK DIAGRAM (4/4)


A
B
C
D
E
F
G
H
1
2
3
4
5
6
AM ANTENNA
AM TRACKING fL
T302
VD301-1 KV1236Z23F
R319 100K
C330 8P(UJ)
C331 0.047
C332 0.022
C333 0.022
C302 0.001
D301 1N4148
D302 1N4148
AM OSC
T306
VD301-2 KV1236Z23F
R323 68K
C334 18P (UJ)
C335 18P (CH)
C336 470P
R324 100K
AM BAND COVERAGE fL
R321 22
AM LOOP ANTENNA
CNP301
L341
BALUN
D303 1N4148
D304 1N4148
C301 0.001
C340 0.001
C337 0.022
R336 4.7K
SO301 FM ANTENNA TERMINAL
FM MUTE LEVEL
VR351 10K(B)
R358 8.2K
C343 33P
L353 1mH
C361 0.022
C362 3.3/50
AUTO-STOP
C360 0.022
C363 0.022
C364 10/16
C365 0.022
C366 0.001
L354 LOW PASS FILTER
R357 470K
C374 0.015
C373 0.015
R364 6.8K
R363 6.8K
Q351 KRC104 M
SWITCHING
C371 1/50
R361 12K
VCO
X351 456kHz
R350 2.7K
R356 1K
C369 56P
C368 1/50
C372 1/50
R362 12K
IC303 LA1832 FM IF DET./ FM MPX./AM IF
FM IF IN
AM OSC OUT
AM OSC IN
AM MIX OUT
FM AFC
REG
AM RF IN
AM IF IN
GND
VSM
AM LOW CUT
SD
FM/AM OUT
STEREO
FM DET
MPX VCO
VCC
MPX IN
IF OUT
R-CH OUT
PHASE
L-CH OUT
PHASE (AM/FM)
MOST
R351 5.6K
R352 1K
CF352 AM IF
AM IF
T351
C351 0.022
C352 10/16
C344 33P
C350 0.022
C353 0.022
C354 0.022
C399 0.022
C398 100/10
C356 0.001
R353 270
CF351 FM IF
C358 1/50
C357 2.2/50
R355 3.3K
C370 1/50
R376 10K
C355 22P
L352 100μH
ZD351 MTZJ5.1B
C396 100/10
C395 0.022
C383 0.022
C346 0.022
C345 0.022
R345 4.7K
R143 180
C347 0.022
R344 680
CF301 10.7MHz FM IF
R348 680
R349 33
Q301 2SC380 O
R347 6.8K
FM IF
CF302 10.7MHz
C348 100/16
L342 2.2mH
R346 330
R369A 68
R369B 82
C341 0.022
FE301 FM FRONT END
ANT
GND
VCC
VT
F OUT
IF OUT
R382 330
C397 0.022
C394 47/16
R386 330
TP301
VT
R381 10K
R380 1.5K
C393 1/50
C392 0.001
C380 1/50
C387 0.022
C385 0.01
L351 100μH
R377 5.6K
R393 1K
R395 47K
R387 5.6K
R379 2.2K
R391 390
R392 390
Q360 KTA1266 GR
FM RIPPLE FILTER
R383 5.6K
R385 5.6K
R384 6.8K
C391 47/16
C381 12P(CH)
X352 4.5MHz
C382 15P(CH)
C386 330P
R365 10K
IC302 LC72131 PLL CONTROLLER
R374 1K
R373 1K
R372 1K
R371 1K
R359 1.8K
R360 4.7K
C384 0.001
FM+B
CNP603
L-CH
A-GND
R-CH
ERASE
M_12V
D_GND
VDO
CL
DO
CE
DI
VSM
(FOR XL-560E/XL-570E) TO CD SERVO PWB CNS603 P29 12-D
(FOR XL-560H/XL-570H) TO CD SERVO PWB CNS603 P29 12-A
XL-560H XL-570H ONLY
IC101 BA3126N HEAD SELECTOR
R101 1K
REC SW
P/B SW CONT
P/B SW
C101 0.001
R140 10K
C121 82P
R139 2.7K
C102 0.001
R138 330
C131 820P
R102 1K
C122 82P
Q101~Q104 SWITCHING
Q101 KTC3199 GR
Q103 KTC3199 GR
R117 22K
C113 4.7/25
C115 0.0022
R126 5.6K
R121 4.7K
R123 4.7K
R119 100
Q102 KTC3199 GR
Q104 KTC3199 GR
C130 4.7/25
C114 4.7/25
R118 22K
R122 4.7K
R124 4.7K
R120 100
C116 0.0022
C117 10/16
R125 100K
R116 15K
R115 15K
C129 4.7/25
R105 150K
R103 120
R107 10K
C109 0.015(ML)
R109 3.9K
R127 3.9K
IC102 BA3311L PLAYBACK AND RECORD/ PLAYBACK AMP.
C107 47/16
C111 10/16
R129 3.3K
C119 0.01
C105 270P
C103 330P
C104 330P
MUTE
ALC
C106 270P
R104 120
C108 47/16
R108 10K
C110 0.015(ML)
R110 3.9K
C112 10/16
R106 150K
R128 3.9K
R111 2.2K
REC MUTE
R131 4.7K
Q105 KTC3199 GR
D101 1N4148
C126 22/16
R134 100K
R133 1K
C118 0.022
C123 2.2/50
R141 330
C125 100/25
C124 47/16
D102 1N4148
R135 680K
Q107 KRC104 M SWITCHING
R136 10K
D105 1N4148
R112 2.2K
R130 33K
C120 0.01
R132 4.7K
D104 1N4148
Q106 KTC3199 GR
R114 3.3K
R113
R137
D106
REC
TAPE
Q171 KRA102 M SWITCHING
Q172 KRC102 M
C151 180P
C152 0.001
C153 0.0039 (P.P)
R151 47K
R152 100K
Q152 KTA1266 GR
R159 5.6K
R160 5.6K
Q154 KTC3199 GR
C154 0.027 (ML)
L151 330μH
Q151 2SC2001 K
C155 4.7/25
SWITCHING
R154 10K
R153 10K
R155 56
C156 0.022
Q155 KTC3199 GR
Q153 KRC104 M REC BIAS CONT
R157 150
R156 150
Q154,Q155 BEAT CANCEL SWITCHING
FM SIGNAL
AM SIGNAL
PLAYBACK SIGNAL
RECORD SIGNAL
CD SIGNAL
CNP602
BIAS
B.CAN
REC
SD
FM ST
R.MUTE
CD+B
P.STB
A 12V
P MUTE
CD L
CD R
A.GND
S7.5V
M.GND
TO CD SERVO PWB CNS602 P29 12-E (FOR XL-560E/XL-570E)

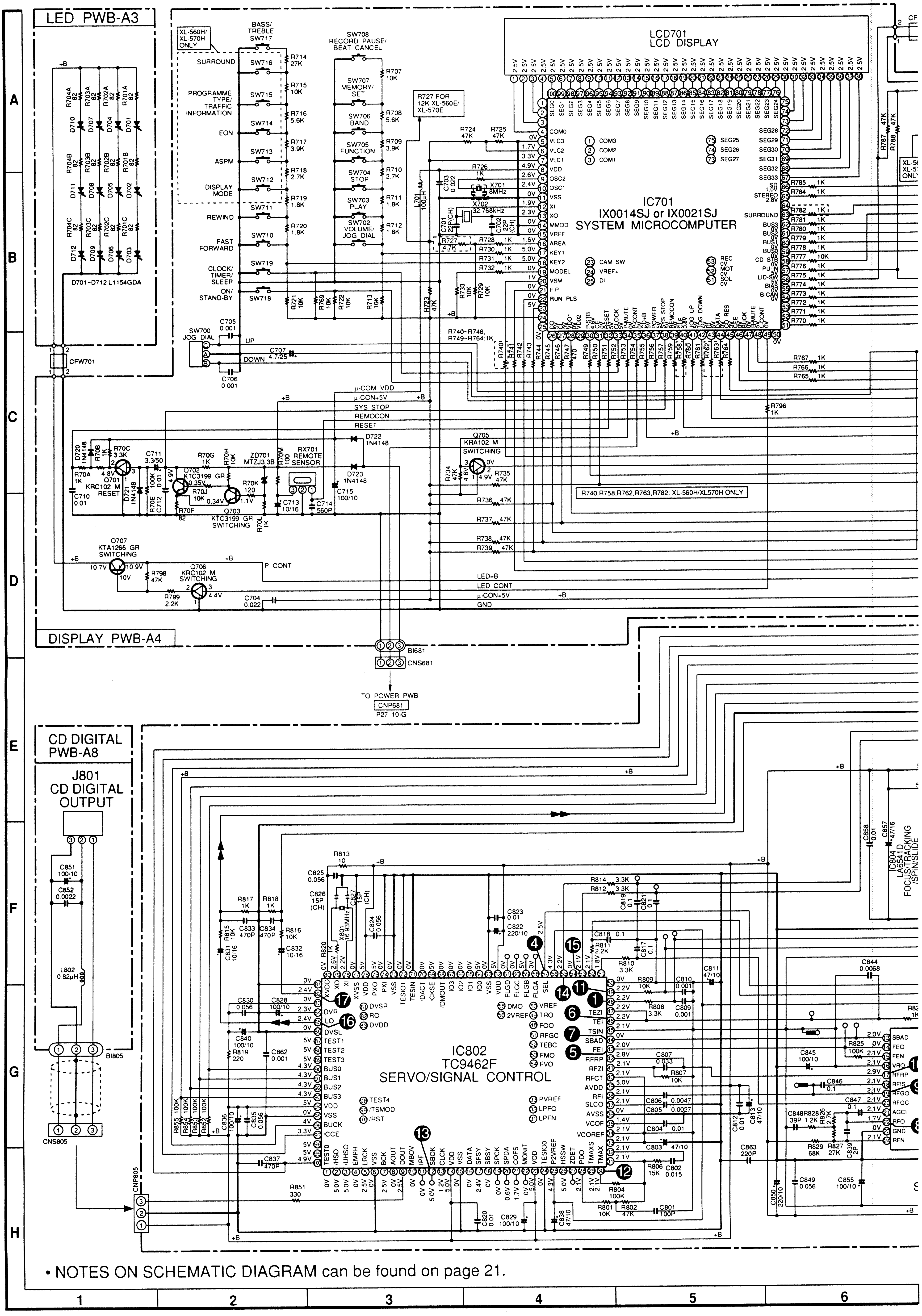
• NOTES ON SCHEMATIC DIAGRAM can be found on page 21.

Figure 26 SCHEMATIC DIAGRAM (1/4)


MAIN PWB-A1
IC201
K1A4558P
SURROUND
CONTROL
IC521
LA2232
RDS DECODER
Q501
KRC102 M
SWITCHING
Q502
KRC102 M
SWITCHING
Q203
KRC107 M
Q207
2SK246 GR
D201
1N4148
( )SURROUND OFF
XL-560E/XL-570E ONLY
XL-560H/
XL-570H ONLY
RDS DATA
RDS CLK
SURROUND
IC401
M62495FP
AUDIO PROCESSOR
SO401
VIDEO/
AUX
INPUT
R-CH
L-CH
CD L
TUN L
TAPE L
TUNER R
TAPE R
CD R
VSM
R-MUTE
FM RIPPLE
FILTER
A GND
STEREO
SD
A 12V
D GND
REC L
REC R
TAPE R
TAPE L
POWER AMP PWB-B2
IC601
POWER AMP
LA4450
CNP604
CNS604
STAND-BY
SO601
SPEAKER
TERMINALS
L-CH
GND
GND
R-CH
HEADPHONES
PWB-A2
CNW601
J601
HEADPHONES
POWER PWB-B1
D651~5654:1N5402M
D656~D569:1N4004
T651
MAIN POWER TRANSFORMER
F651
T3.15A L 250V
T1.25A L 250V
Q607
2SD2012 Y
Q603~Q609 VOLTAGE REGULATOR
Q606
KTC3199 GR
Q608
KRA102 M
Q609
KRC107 M
ZD602
MTZJ7.5C
Q605
2SD2012 Y
Q604
2SD2012 Y
Q603
KTC3199 GR
ZD601
MTZJ13A
TO TRC MOTOR M 12V
TO µ-COM
A 12V
TO TUN
TO TAPE EQ
TO A-PROC
CD(6.2V)
CD-DSP
CD P-OPE
Q681~Q683
VOLTAGE
REGULATOR
Q681
2SD468 C
Q682
2SD468 C
Q683
KTC3199 GR
ZD682
MTZJ5.6B
ZD681
MTZJ6.8A
RLY681
D681~D684 1N4004
T681
SUB POWER
TRANSFORMER
LF651
LINE
FILTER
SO651
AC POWER
INPUT SOCKET
AC230V,50Hz
FROM LED PWB
CNS681
P28 3-E
CNP653
CNP651
CNP652
CNP581
SURROUND
RDS DATA
RDS CLK
BIAS
B.CAN
REC
SD
FM ST
R.MUTE
CD+B
P.STB
A 12V
P MUTE
CD L
CD R
A GND
S6.2V
M.GND
CNP602
TO CD SERVO PWB
CNS602
P29 12-B
(FOR XL-560H/XL-570H)
7
8
9
10
11
12

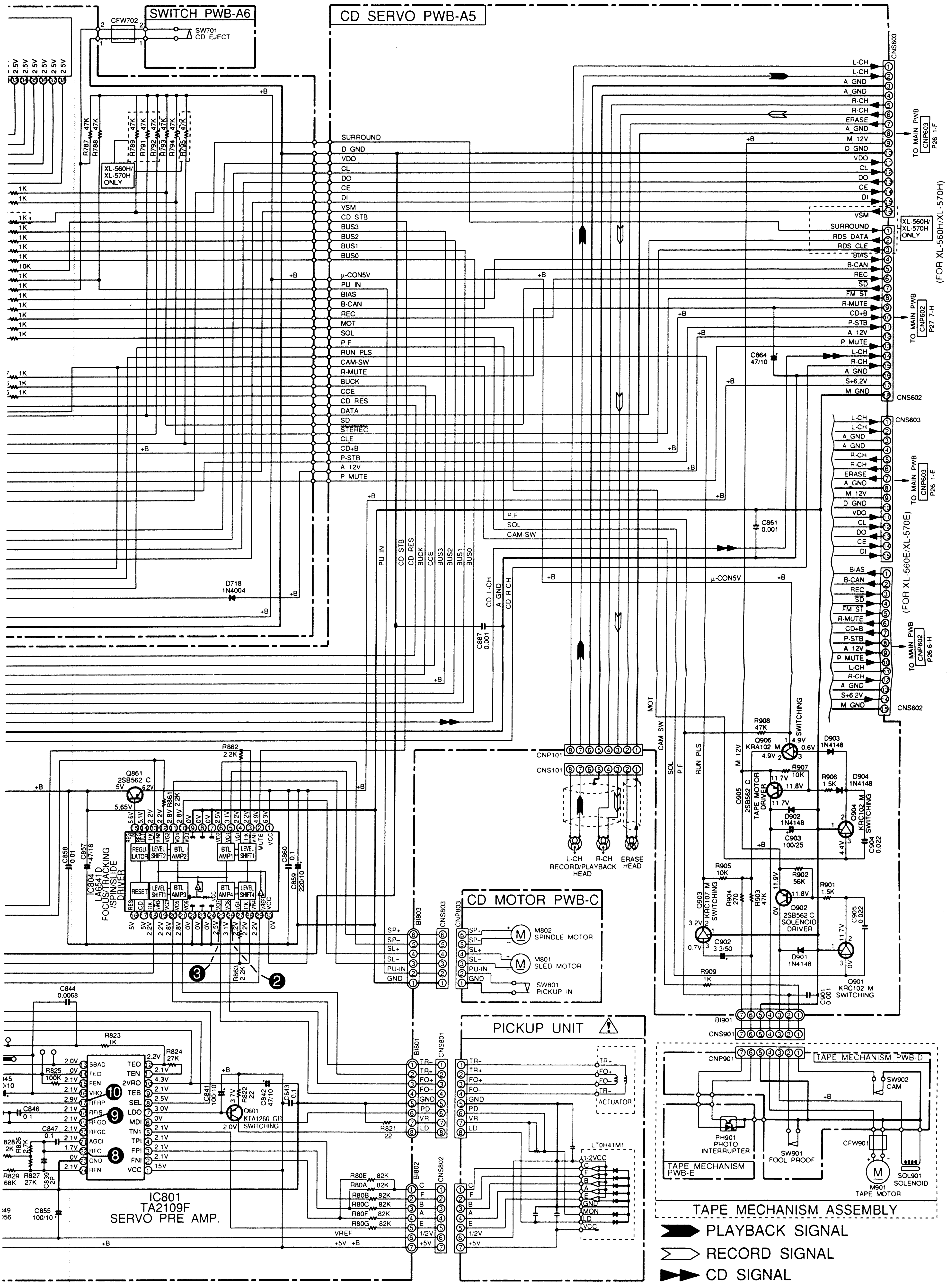
When servicing,pay attention as the area enclosed by this line(▬ ▬)is directly connected with AC main voltage.

Figure 27 SCHEMATIC DIAGRAM (2/4)


LED PWB-A3
D701~D712 L1154GDA
CFW701
XL-560H/ XL-570H ONLY
BASS/ TREBLE SW717
SURROUND SW716
PROGRAMME TYPE/ TRAFFIC INFORMATION SW715
EON SW714
ASPM SW713
DISPLAY MODE SW712
REWIND SW711
FAST FORWARD SW710
CLOCK/ TIMER/ SLEEP SW719
ON/ STAND-BY SW718
SW708 RECORD PAUSE/ BEAT CANCEL
SW707 MEMORY/ SET
SW706 BAND
SW705 FUNCTION
SW704 STOP
SW703 PLAY
SW702 VOLUME/ JOG DIAL
SW700 JOG DIAL
UP
DOWN
R727 FOR 12K XL-560E/ XL-570E
LCD701 LCD DISPLAY
IC701 IX0014SJ or IX0021SJ SYSTEM MICROCOMPUTER
X701 8MHz
X702 32.768kHz
R740~R746, R749~R764 1K
R740,R758,R762,R763,R782: XL-560H/XL570H ONLY
µ-COM VDD
µ-CON+5V
SYS STOP
REMOCON
RESET
Q705 KRA102 M SWITCHING
Q701 KRC102 M RESET
Q702 KTC3199 GR
Q703 KTC3199 GR SWITCHING
ZD701 MTZJ3.3B
RX701 REMOTE SENSOR
Q707 KTA1266 GR SWITCHING
Q706 KRC102 M SWITCHING
P CONT
LED+B
LED CONT
GND
DISPLAY PWB-A4
BI681
CNS681
TO POWER PWB CNP681 P27 10-G
CD DIGITAL PWB-A8
J801 CD DIGITAL OUTPUT
BI805
CNS805
CNP805
IC802 TC9462F SERVO/SIGNAL CONTROL
X801 16.93MHz
IC804 LA6541D FOCUS/TRACKING /SPIN/SLIDE
A
B
C
D
E
F
G
H
1
2
3
4
5
6

• NOTES ON SCHEMATIC DIAGRAM can be found on page 21.

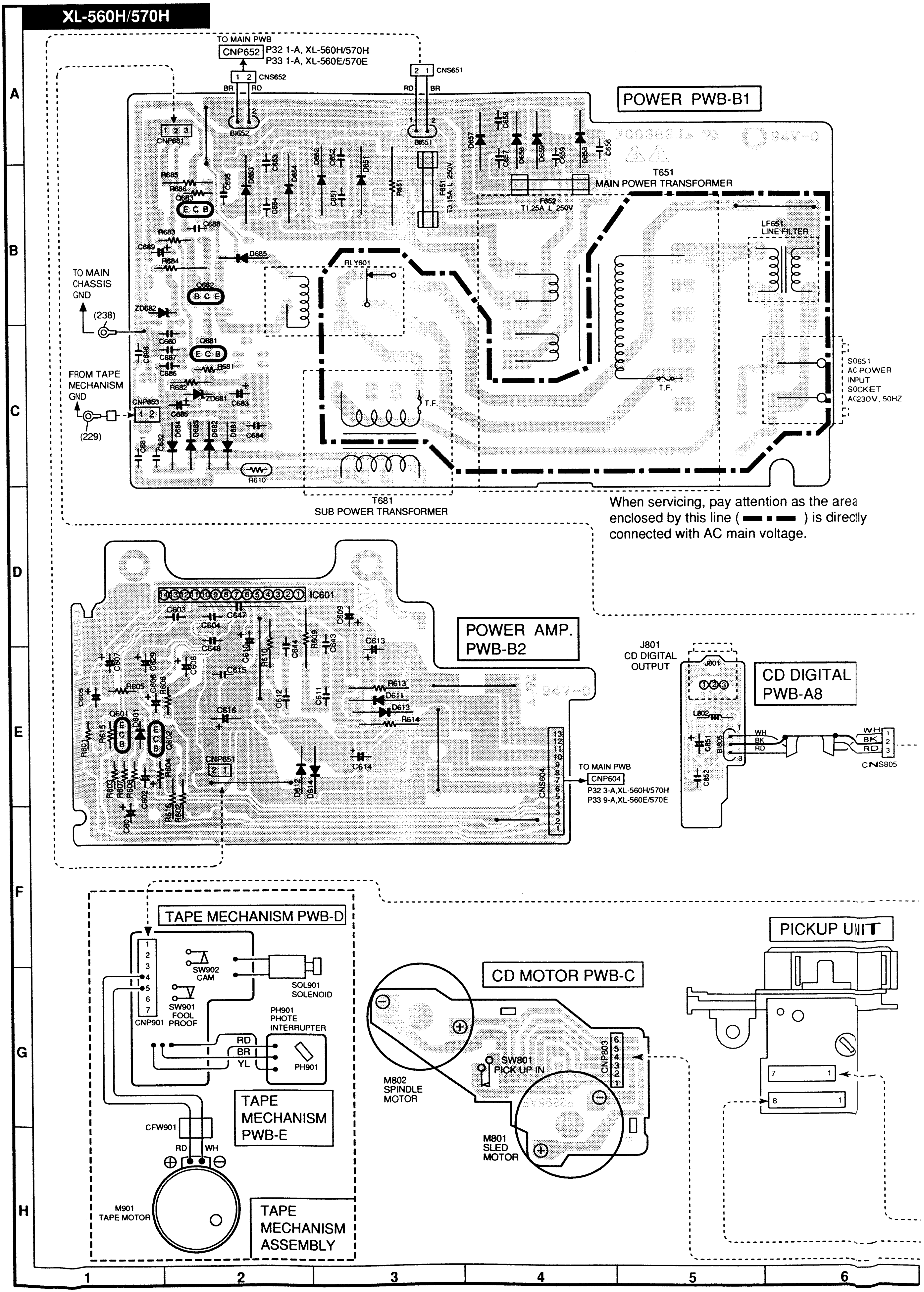
Figure 26 SCHEMATIC DIAGRAM (3/4)


SWITCH PWB-A6
CFW702
SW701 CD EJECT
CD SERVO PWB-A5
XL-560H/ XL-570H ONLY
SURROUND
D GND
VDO
CL
DO
CE
DI
VSM
CD STB
BUS3
BUS2
BUS1
BUS0
μ-CON5V
PU IN
BIAS
B-CAN
REC
MOT
SOL
P.F
RUN PLS
CAM-SW
R-MUTE
BUCK
CCE
CD RES
DATA
SD
STEREO
CLE
CD+B
P-STB
A 12V
P MUTE
CNS603
CNS602
TO MAIN PWB CNP603 P26 1-F
TO MAIN PWB CNP602 P27 7-H
(FOR XL-560H/XL-570H)
TO MAIN PWB CNP603 P26 1-E
TO MAIN PWB CNP602 P26 6-H
(FOR XL-560E/XL-570E)
L-CH
R-CH
A GND
ERASE
M 12V
RDS DATA
RDS CLE
FM ST
S+6.2V
M GND
C864 47/10
C861 0.001
C887 0.001
CD L-CH
A GND
CD R-CH
D718 1N4004
R862 2.2K
Q861 2SB562 C
C858 0.01
C857 47/16
IC804 LA6541D FOCUS/TRACKING /SPIN/SLIDE DRIVER
REGU-LATOR
LEVEL SHIFT2
BTL AMP2
BTL AMP1
LEVEL SHIFT1
RESET
LEVEL SHIFT3
BTL AMP3
BTL AMP4
LEVEL SHIFT4
C860 0.1
C859 220/10
R863 2.2K
CNP101
CNS101
L-CH R-CH RECORD/PLAYBACK HEAD
ERASE HEAD
CD MOTOR PWB-C
BI803
CNS803
CNP803
M802 SPINDLE MOTOR
M801 SLED MOTOR
SW801 PICKUP IN
SP+
SP-
SL+
SL-
PU-IN
GND
MOT
CAM SW
SOL
P.F
RUN PLS
M 12V
R908 47K
Q906 KRA102 M SWITCHING
D903 1N4148
R907 10K
R906 1.5K
D904 1N4148
Q905 2SB562 C TAPE MOTOR DRIVER
D902 1N4148
Q904 KRC102 M SWITCHING
C903 100/25
C904 0.022
R905 10K
Q903 KRC107 M SWITCHING
R904 270
R903 47K
R902 56K
R901 1.5K
Q902 2SB562 C SOLENOID DRIVER
C905 0.022
C902 3.3/50
D901 1N4148
R909 1K
C901 0.001
Q901 KRC102 M SWITCHING
BI901
CNS901
CNP901
TAPE MECHANISM PWB-D
SW902 CAM
PH901 PHOTO INTERRUPTER
SW901 FOOL PROOF
CFW901
TAPE MECHANISM PWB-E
M901 TAPE MOTOR
SOL901 SOLENOID
TAPE MECHANISM ASSEMBLY
PICKUP UNIT
TR-
TR+
FO+
FO-
PD
VR
LD
ACTUATOR
LT0H41M1
1/2VCC
MON
VCC
BI801
CNS801
BI802
CNS802
R80E 82K
R80A 82K
R80B 82K
R80C 82K
R80F 82K
R80G 82K
VREF
+5V +B
C844 0.0068
R823 1K
R824 27K
R825 100K
C846 0.1
C847 0.1
R826 2.7K
R829 68K
R827 27K
C839 2P
C855 100/10
C841 100/10
R822 22
C842 47/10
C843 0.1
Q801 KTA1266 GR SWITCHING
R821 22
IC801 TA2109F SERVO PRE AMP.
SBAD
FEO
FEN
VRO
RFRP
RFIS
RFGO
RFGC
AGCI
RFO
GND
RFN
TEO
TEN
2VRO
TEB
SEL
LDO
MDI
TN1
TPI
FPI
FNI
VCC
❷
❸
❽
❾
❿
+B
PLAYBACK SIGNAL
RECORD SIGNAL
CD SIGNAL

• The numbers ❶ to ⑰ are waveform numbers shown in page 35.

7	8	9	10	11	12

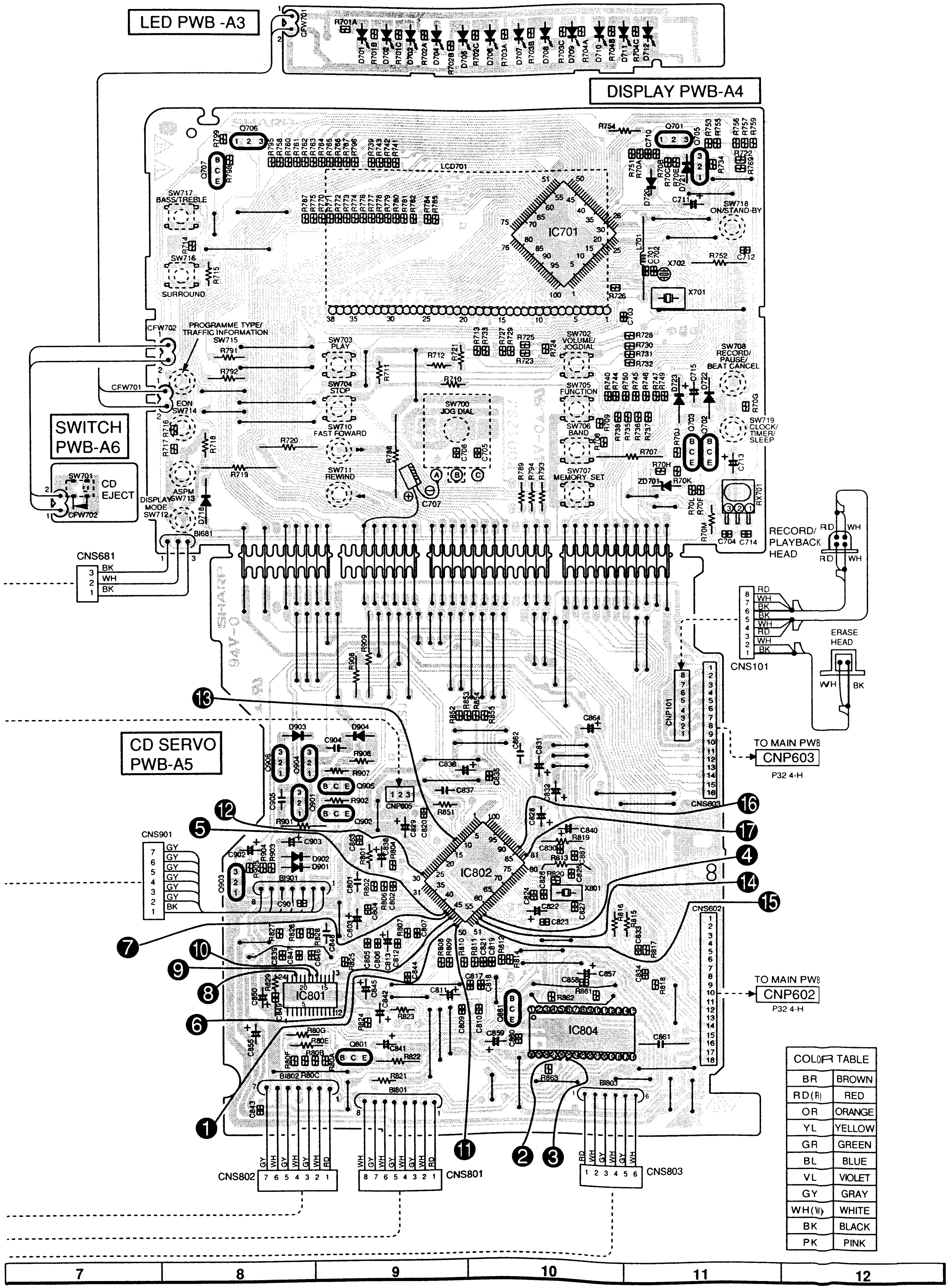
Figure 29 SCHEMATIC DIAGRAM (4/4)


XL-560H/570H
TO MAIN PWB
CNP652
P32 1-A, XL-560H/570H
P33 1-A, XL-560E/570E
CNS652
CNS651
BR
RD
POWER PWB-B1
CNP681
BI652
BI651
R685
R686
C683
C695
D653
C653
C654
D654
D652
C652
C651
D651
R651
F651 T3.15A L 250V
D657
C658
C657
D658
D659
C659
D656
C656
T651
MAIN POWER TRANSFORMER
F652 T1.25A L 250V
R683
C688
C689
R684
D685
TO MAIN CHASSIS GND
(238)
Q682
RLY601
ZD682
C680
C687
C686
C696
Q681
R681
R682
ZD681
C683
C685
C684
FROM TAPE MECHANISM GND
CNP653
(229)
C681
C682
D684
D683
D682
D681
R610
T.F.
T681
SUB POWER TRANSFORMER
LF651
LINE FILTER
SO651
AC POWER INPUT SOCKET
AC230V, 50HZ
IC601
C603
C647
C604
C648
C609
C613
R609
C643
C644
R610
C610
POWER AMP. PWB-B2
C607
C629
C608
C615
C605
R605
C606
R606
R613
D611
D613
R614
C612
C611
C616
Q601
R615
D601
Q602
R601
CNP651
C614
R603
R607
R608
C602
R604
R616
R602
C601
D612
D614
CNS604
TO MAIN PWB
CNP604
P32 3-A,XL-560H/570H
P33 9-A,XL-560E/570E
J801
CD DIGITAL OUTPUT
CD DIGITAL PWB-A8
L802
C851
BI805
C852
WH
BK
RD
CNS805
TAPE MECHANISM PWB-D
SW902 CAM
SOL901 SOLENOID
SW901 FOOL PROOF
CNP901
PH901 PHOTE INTERRUPTER
PH901
YL
TAPE MECHANISM PWB-E
CFW901
M901 TAPE MOTOR
TAPE MECHANISM ASSEMBLY
CD MOTOR PWB-C
M802 SPINDLE MOTOR
SW801 PICK UP IN
CNP803
M801 SLED MOTOR
PICKUP UNIT
A
B
C
D
E
F
G
H
1
2
3
4
5
6

When servicing, pay attention as the area enclosed by this line (▬ ▪ ▬) is directly connected with AC main voltage.

Figure 30 WIRING SIDE OF P.W.BOARD (1/5)

• The numbers ❶ to ⑰ are waveform numbers shown in page 35.


LED PWB -A3
CFW701
DISPLAY PWB-A4
LCD701
IC701
SW717 BASS/TREBLE
SW716 SURROUND
SW718 ON/STAND-BY
PROGRAMME TYPE/ TRAFFIC INFORMATION SW715
SW703 PLAY
SW704 STOP
SW710 FAST FOWARD
SW711 REWIND
SW700 JOG DIAL
SW702 VOLUME/ JOGDIAL
SW705 FUNCTION
SW706 BAND
SW707 MEMORY SET
SW708 RECORD/ PAUSE/ BEAT CANCEL
SW719 CLOCK/ TIMER/ SLEEP
EON SW714
ASPM SW713
DISPLAY MODE SW712
CFW702
SWITCH PWB-A6
SW701 CD EJECT
CNS681
BK
WH
BK
RX701
RECORD/ PLAYBACK HEAD
RD
WH
ERASE HEAD
CNS101
CNP101
TO MAIN PWB CNP603
P32 4-H
CD SERVO PWB-A5
CNS901
GY
BK
IC802
IC801
IC804
CNS603
CNS602
TO MAIN PWB CNP602
P32 4-H
CNS802
CNS801
CNS803
RD
7
8
9
10
11
12

COLOR	TABLE
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

Figure 29 WIRING SIDE OF P.W.BOARD (2/5)

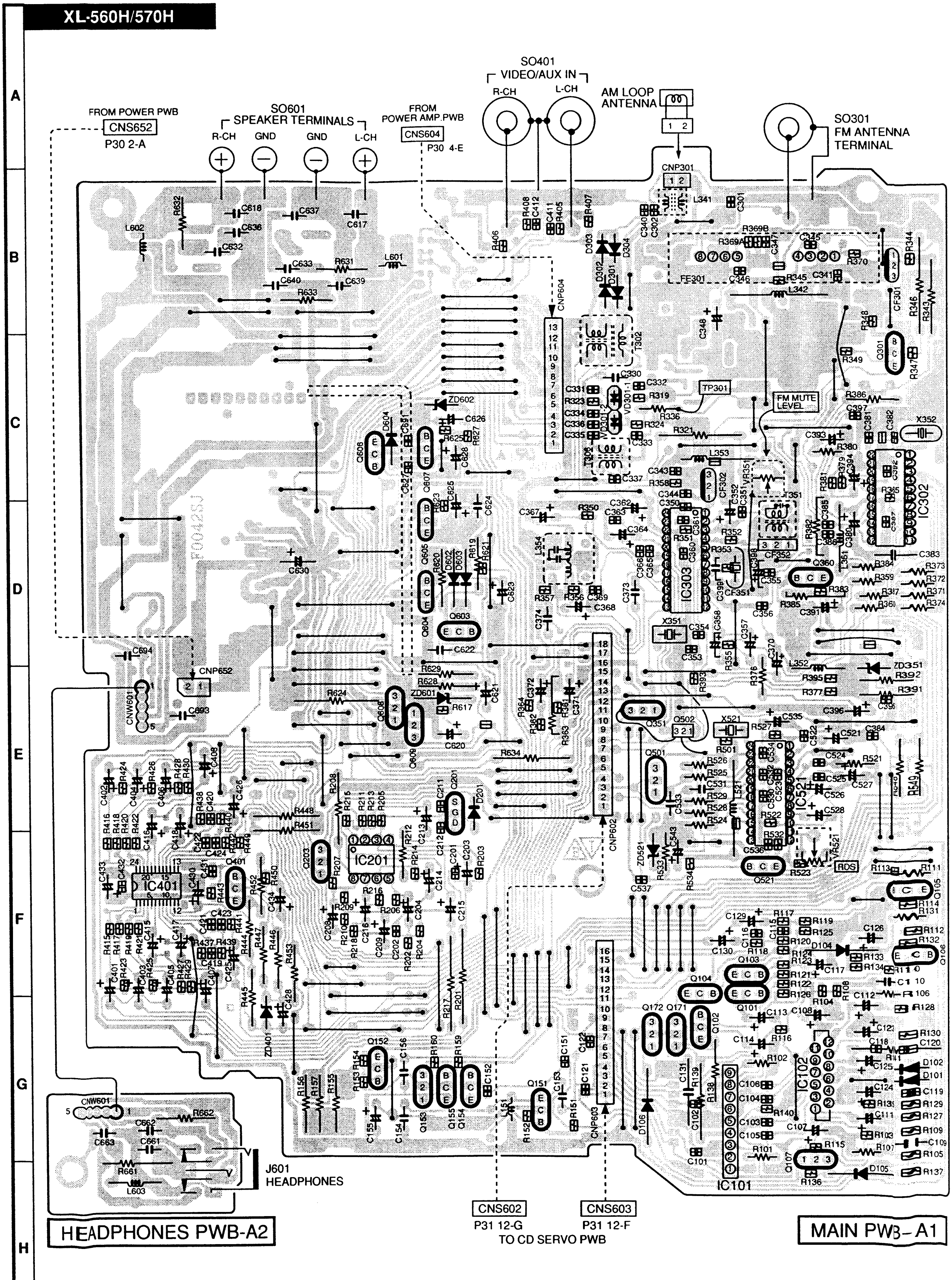

XL-560H/570H
A
B
C
D
E
F
G
H
1
2
3
4
5
6
FROM POWER PWB
CNS652
P30 2-A
SO601
SPEAKER TERMINALS
R-CH
GND
GND
L-CH
FROM
POWER AMP.PWB
CNS604
P30 4-E
SO401
VIDEO/AUX IN
R-CH
L-CH
AM LOOP
ANTENNA
CNP301
SO301
FM ANTENNA
TERMINAL
FE301
TP301
FM MUTE
LEVEL
IC302
IC303
IC521
IC401
IC201
IC101
IC102
CNP604
CNP602
CNP603
CNP652
CNW601
RDS
J601
HEADPHONES
CNS602
P31 12-G
CNS603
P31 12-F
TO CD SERVO PWB
HEADPHONES PWB-A2
MAIN PWB-A1

Figure 32 WIRING SIDE OF P.W.BOARD (3/5)

XL-560E/570E

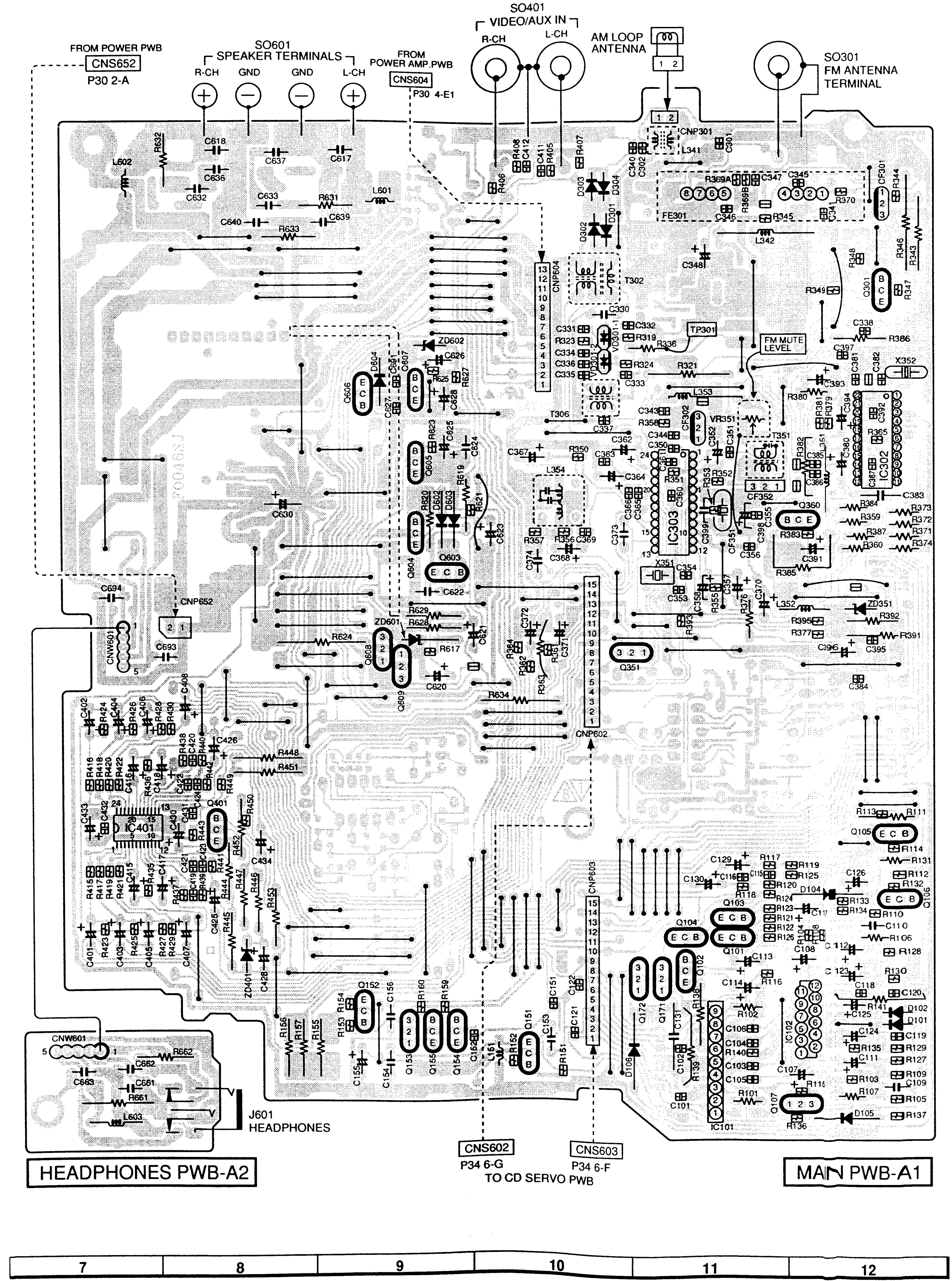
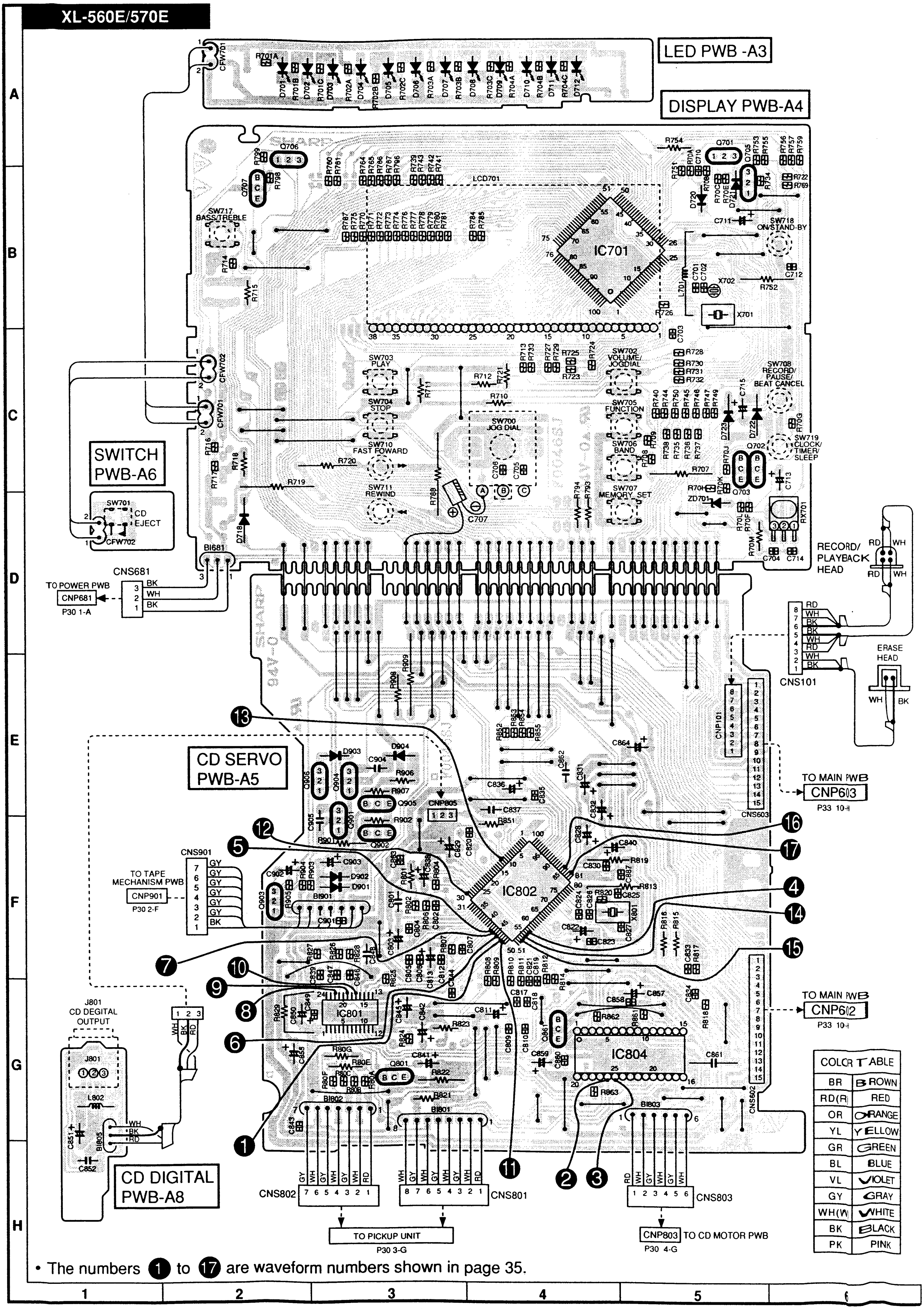

FROM POWER PWB
CNS652
P30 2-A
SO601
SPEAKER TERMINALS
R-CH
GND
GND
L-CH
FROM POWER AMP.PWB
CNS604
P30 4-E1
SO401
VIDEO/AUX IN
R-CH
L-CH
AM LOOP ANTENNA
1 2
SO301
FM ANTENNA TERMINAL
CNP301
FE301
CNP604
T302
TP301
FM MUTE LEVEL
VR351
IC302
IC303
X351
X352
CNP652
CNW601
CNP602
CNP603
IC401
IC101
IC102
Q601
Q603
Q604
Q605
Q606
Q607
Q608
Q609
Q301
Q351
Q360
Q401
Q101
Q102
Q103
Q104
Q105
Q106
Q107
Q151
Q152
Q153
Q154
Q155
Q171
Q172
ZD601
ZD602
ZD351
ZD401
D301
D302
D303
D304
D602
D603
D604
D101
D102
D104
D105
D106
L341
L342
L352
L353
L354
L601
L602
L603
T306
T351
CF301
CF302
CF351
CF352
J601
HEADPHONES
HEADPHONES PWB-A2
CNS602
P34 6-G
CNS603
P34 6-F
TO CD SERVO PWB
MAIN PWB-A1
7
8
9
10
11
12

Figure 33 WIRING SIDE OF P.W.BOARD (4/5)


XL-560E/570E
LED PWB -A3
DISPLAY PWB-A4
SWITCH PWB-A6
CD SERVO PWB-A5
CD DIGITAL PWB-A8
IC701
IC802
IC801
IC804
LCD701
SW717 BASS/TREBLE
SW718 ON/STAND-BY
SW703 PLAY
SW704 STOP
SW710 FAST FOWARD
SW711 REWIND
SW700 JOG DIAL
SW702 VOLUME/JOGDIAL
SW705 FUNCTION
SW706 BAND
SW707 MEMORY SET
SW708 RECORD/PAUSE/BEAT CANCEL
SW719 CLOCK/TIMER/SLEEP
SW701 CD EJECT
CFW701
CFW702
BI681
CNS681
TO POWER PWB
CNP681
P30 1-A
RECORD/PLAYBACK HEAD
ERASE HEAD
CNS101
CNP101
CNS603
TO MAIN PWB
CNP603
P33 10-H
CNS602
TO MAIN PWB
CNP602
P33 10-H
CNS901
TO TAPE MECHANISM PWB
CNP901
P30 2-F
J801 CD DEGITAL OUTPUT
CNS802
CNS801
TO PICKUP UNIT
P30 3-G
CNS803
CNP803 TO CD MOTOR PWB
P30 4-G
A
B
C
D
E
F
G
H
1
2
3
4
5
6

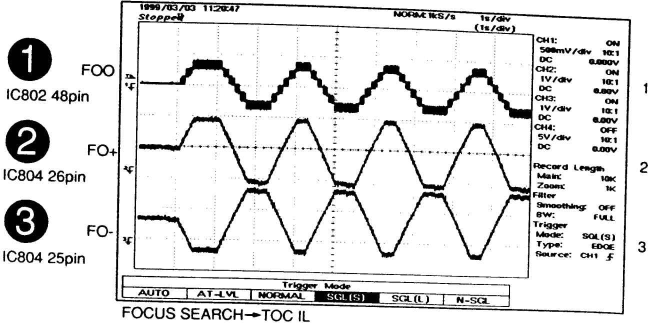
COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

- The numbers ❶ to ⓱ are waveform numbers shown in page 35.

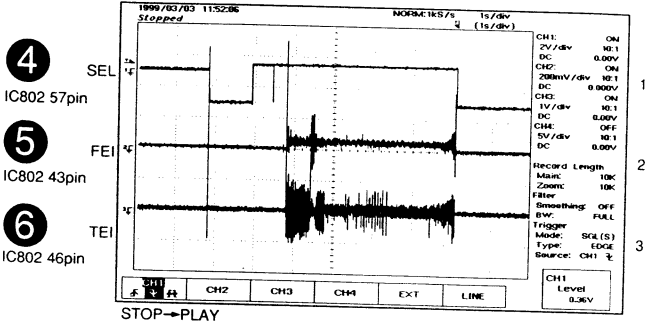
Figure 34 WIRING SIDE OF P.W.BOARD (5/5)

WAVEFORMS OF CD CIRCUIT

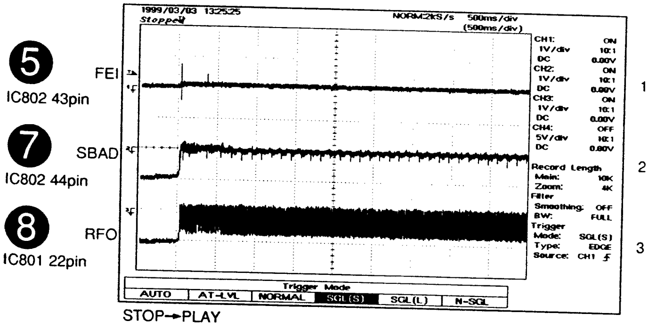
NO DISC FOCUS SEARCH



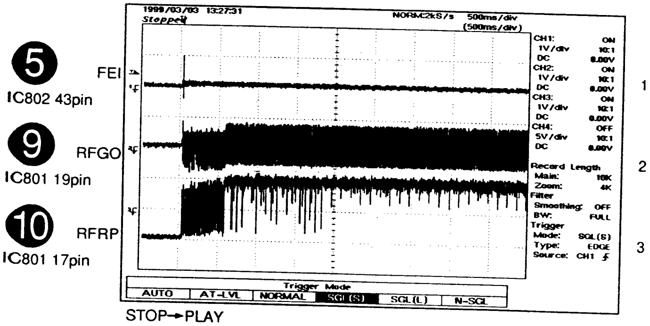
FOCUS SEARCH→TOC IL



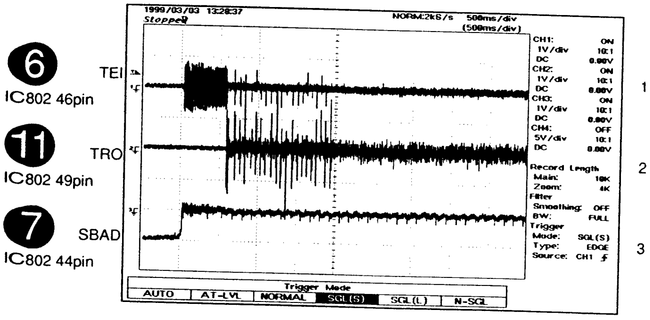
STOP→PLAY



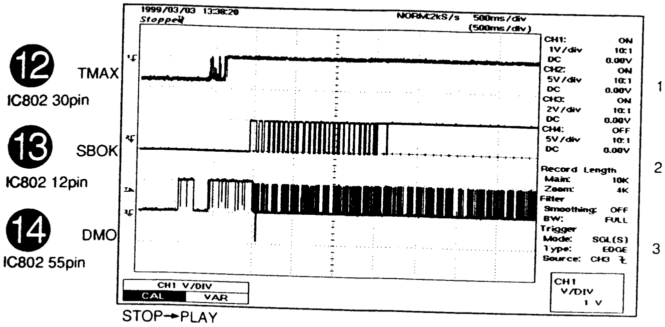
STOP→PLAY



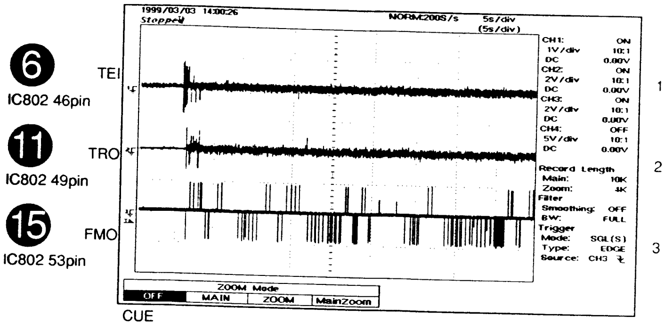
STOP→PLAY



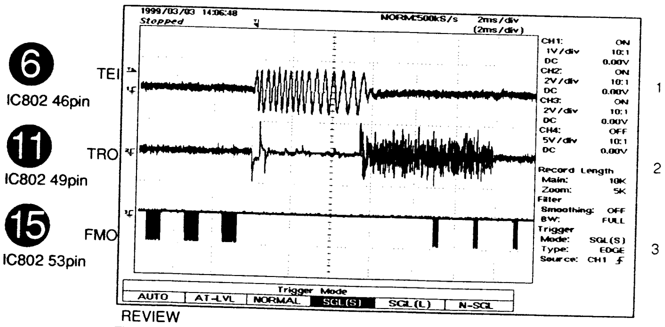
STOP→PLAY



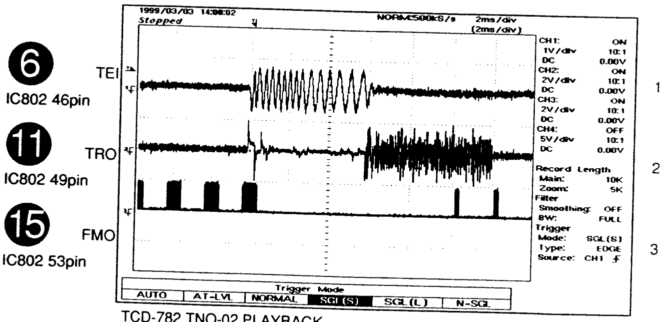
STOP→PLAY



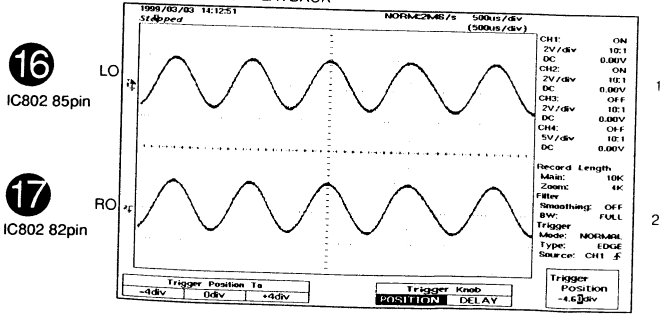
CUE



REVIEW



TCD-782 TNO-02 PLAYBACK



TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the troubleshooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.
Do not touch the lens with the bare hand.

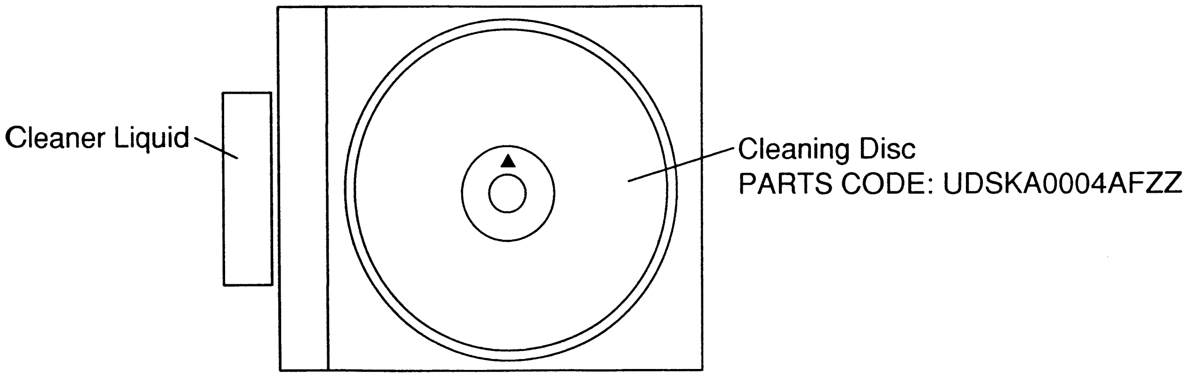
Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

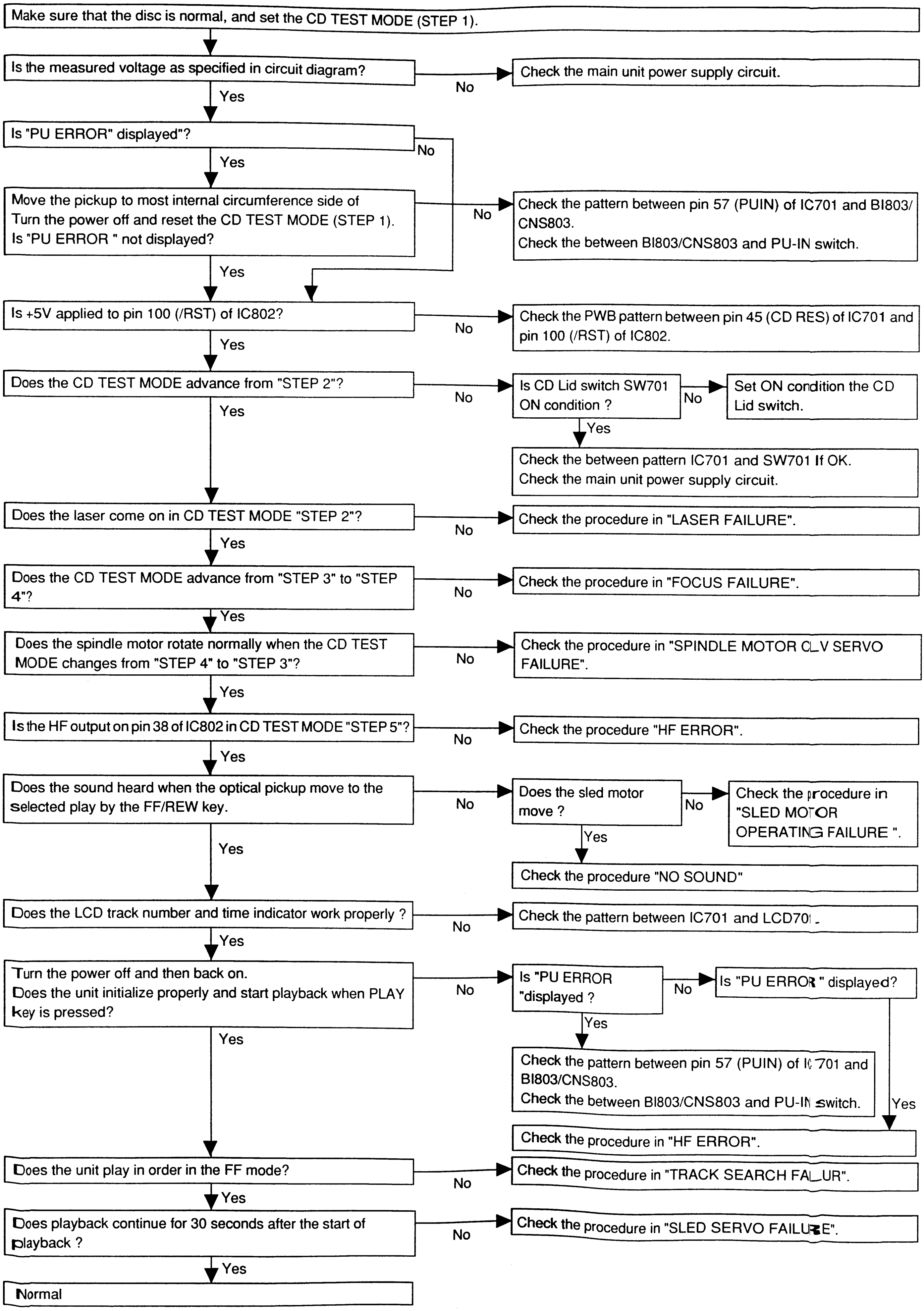
HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the ▲ mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

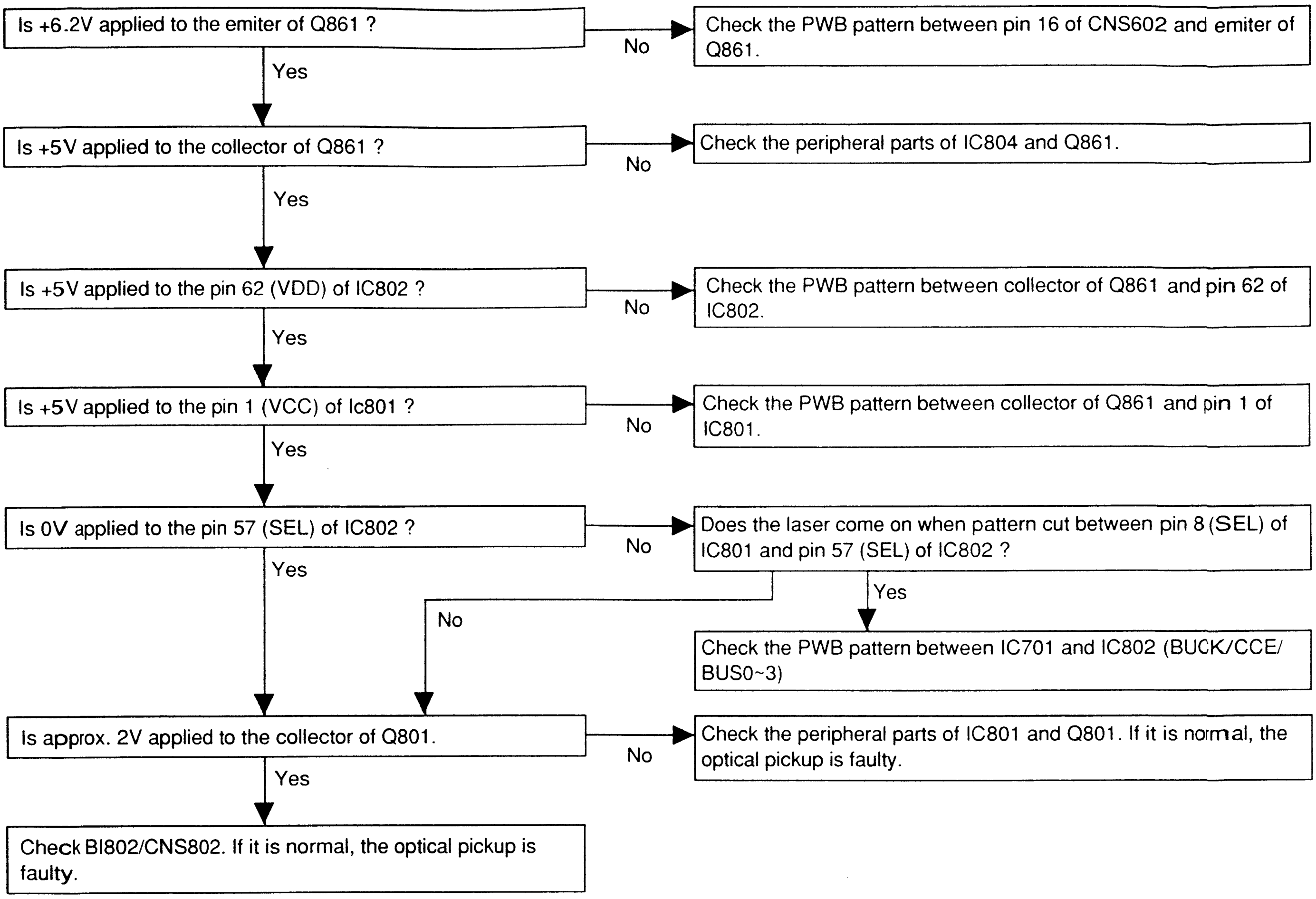
CAUTION

- The CD lens cleaner should be effective for 30~50 operations, however if the brushes become worn out earller then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.




Make sure that the disc is normal, and set the CD TEST MODE (STEP 1).
Is the measured voltage as specified in circuit diagram?
No
Check the main unit power supply circuit.
Yes
Is "PU ERROR" displayed"?
No
Yes
Move the pickup to most internal circumference side of Turn the power off and reset the CD TEST MODE (STEP 1). Is "PU ERROR " not displayed?
No
Check the pattern between pin 57 (PUIN) of IC701 and BI803/CNS803. Check the between BI803/CNS803 and PU-IN switch.
Yes
Is +5V applied to pin 100 (/RST) of IC802?
No
Check the PWB pattern between pin 45 (CD RES) of IC701 and pin 100 (/RST) of IC802.
Yes
Does the CD TEST MODE advance from "STEP 2"?
No
Is CD Lid switch SW701 ON condition ?
No
Set ON condition the CD Lid switch.
Yes
Check the between pattern IC701 and SW701 If OK. Check the main unit power supply circuit.
Yes
Does the laser come on in CD TEST MODE "STEP 2"?
No
Check the procedure in "LASER FAILURE".
Yes
Does the CD TEST MODE advance from "STEP 3" to "STEP 4"?
No
Check the procedure in "FOCUS FAILURE".
Yes
Does the spindle motor rotate normally when the CD TEST MODE changes from "STEP 4" to "STEP 3"?
No
Check the procedure in "SPINDLE MOTOR CLV SERVO FAILURE".
Yes
Is the HF output on pin 38 of IC802 in CD TEST MODE "STEP 5"?
No
Check the procedure "HF ERROR".
Yes
Does the sound heard when the optical pickup move to the selected play by the FF/REW key.
No
Does the sled motor move ?
No
Check the procedure in "SLED MOTOR OPERATING FAILURE ".
Yes
Check the procedure "NO SOUND"
Yes
Does the LCD track number and time indicator work properly ?
No
Check the pattern between IC701 and LCD701.
Yes
Turn the power off and then back on. Does the unit initialize properly and start playback when PLAY key is pressed?
No
Is "PU ERROR "displayed ?
No
Is "PU ERROR " displayed?
Yes
Check the pattern between pin 57 (PUIN) of IC701 and BI803/CNS803. Check the between BI803/CNS803 and PU-IN switch.
Yes
Check the procedure in "HF ERROR".
Yes
Does the unit play in order in the FF mode?
No
Check the procedure in "TRACK SEARCH FAILUR".
Yes
Does playback continue for 30 seconds after the start of playback ?
No
Check the procedure in "SLED SERVO FAILURE".
Yes
Normal

• Laser failure.



Is +6.2V applied to the emiter of Q861 ?

Check the PWB pattern between pin 16 of CNS602 and emiter of Q861.

Is +5V applied to the collector of Q861 ?

Check the peripheral parts of IC804 and Q861.

Is +5V applied to the pin 62 (VDD) of IC802 ?

Check the PWB pattern between collector of Q861 and pin 62 of IC802.

Is +5V applied to the pin 1 (VCC) of Ic801 ?

Check the PWB pattern between collector of Q861 and pin 1 of IC801.

Is 0V applied to the pin 57 (SEL) of IC802 ?

Does the laser come on when pattern cut between pin 8 (SEL) of IC801 and pin 57 (SEL) of IC802 ?

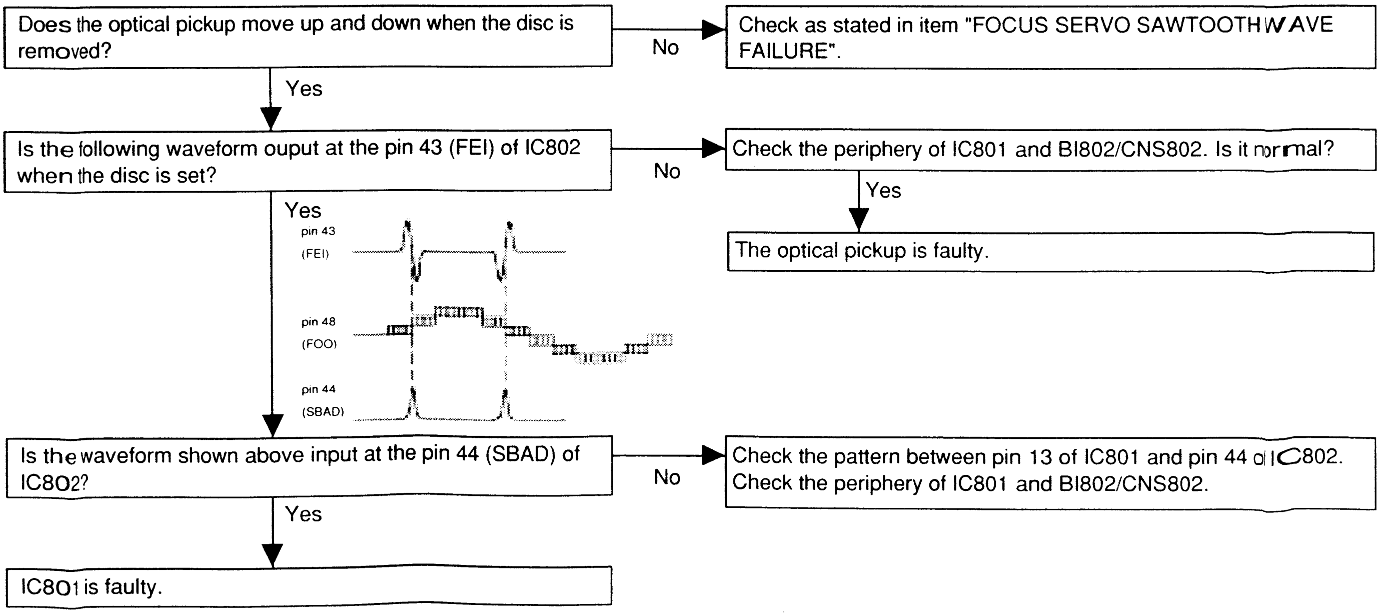
Check the PWB pattern between IC701 and IC802 (BUCK/CCE/BUS0~3)

Is approx. 2V applied to the collector of Q801.

Check the peripheral parts of IC801 and Q801. If it is normal, the optical pickup is faulty.

Check BI802/CNS802. If it is normal, the optical pickup is faulty.

• Focus failure.



Does the optical pickup move up and down when the disc is removed?

Check as stated in item "FOCUS SERVO SAWTOOTH WAVE FAILURE".

Is the following waveform ouput at the pin 43 (FEI) of IC802 when the disc is set?

Check the periphery of IC801 and BI802/CNS802. Is it normal?

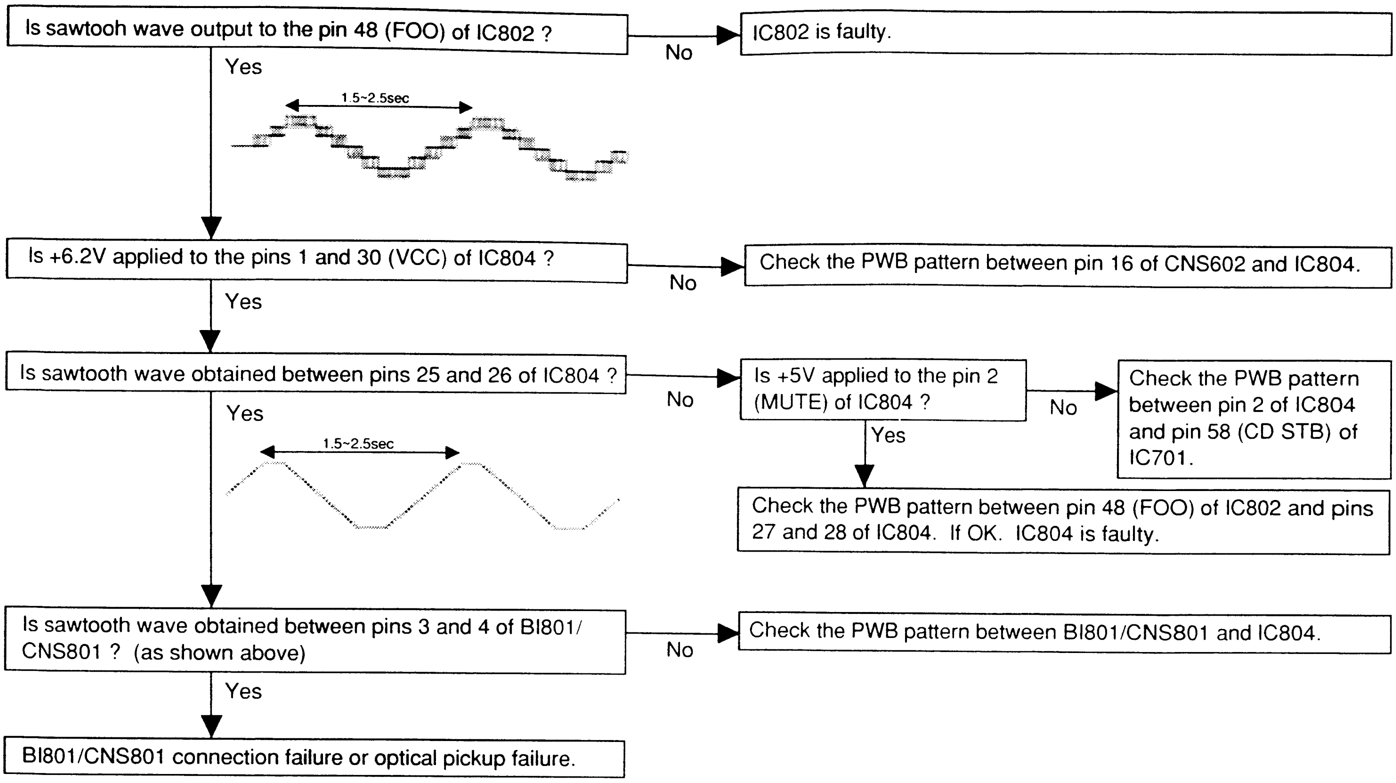
The optical pickup is faulty.

Is the waveform shown above input at the pin 44 (SBAD) of IC802?

Check the pattern between pin 13 of IC801 and pin 44 of IC802. Check the periphery of IC801 and BI802/CNS802.

IC801 is faulty.

• Focus servo sawtooth wave failure.



Is sawtooh wave output to the pin 48 (FOO) of IC802 ?

IC802 is faulty.

Is +6.2V applied to the pins 1 and 30 (VCC) of IC804 ?

Check the PWB pattern between pin 16 of CNS602 and IC804.

Is sawtooth wave obtained between pins 25 and 26 of IC804 ?

Is +5V applied to the pin 2 (MUTE) of IC804 ?

Check the PWB pattern between pin 2 of IC804 and pin 58 (CD STB) of IC701.

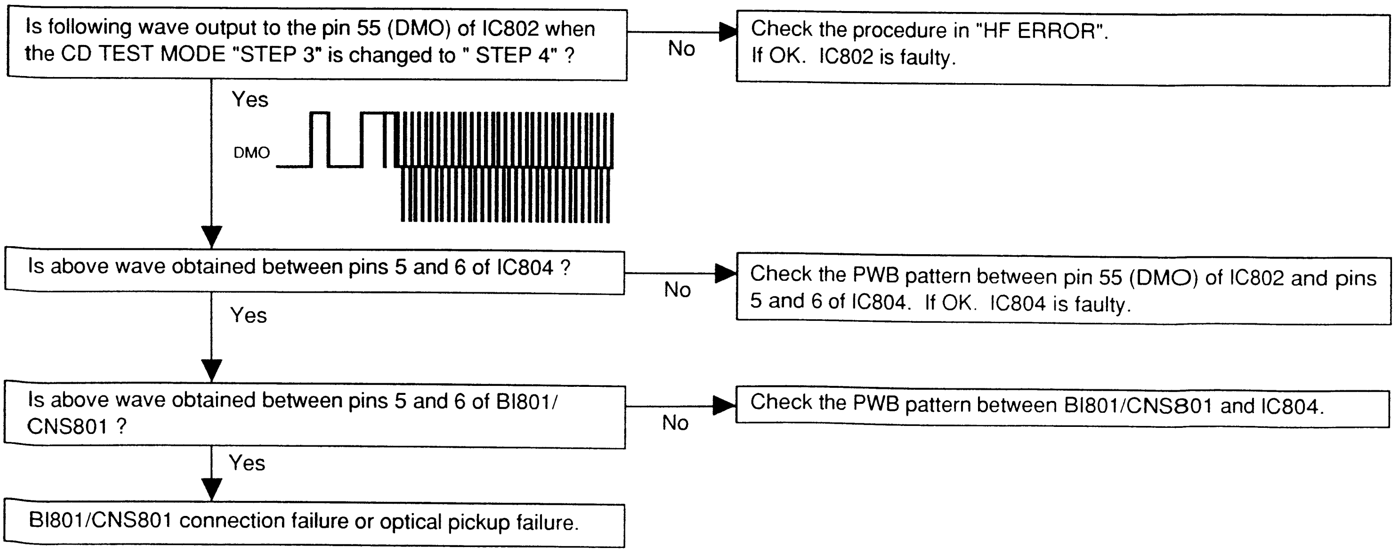
Check the PWB pattern between pin 48 (FOO) of IC802 and pins 27 and 28 of IC804. If OK. IC804 is faulty.

Is sawtooth wave obtained between pins 3 and 4 of BI801/CNS801 ? (as shown above)

Check the PWB pattern between BI801/CNS801 and IC804.

BI801/CNS801 connection failure or optical pickup failure.

• Spindle motor clv servo failure.



Is following wave output to the pin 55 (DMO) of IC802 when the CD TEST MODE "STEP 3" is changed to " STEP 4" ?

Check the procedure in "HF ERROR".
If OK. IC802 is faulty.

Is above wave obtained between pins 5 and 6 of IC804 ?

Check the PWB pattern between pin 55 (DMO) of IC802 and pins 5 and 6 of IC804. If OK. IC804 is faulty.

Is above wave obtained between pins 5 and 6 of BI801/CNS801 ?

Check the PWB pattern between BI801/CNS801 and IC804.

BI801/CNS801 connection failure or optical pickup failure.

• HF error.

Is output (tracking error signal) obtained at the pins 46 (TEI) and 47 (TEZI) of IC802 the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 2 and 5 of BI802/CNS802

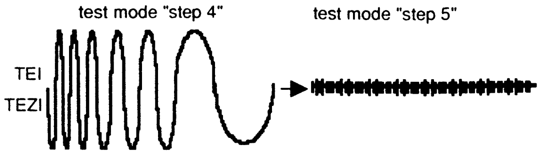
No → Optical pickup failure.

Yes → Check the periphery of IC801. Check the PWB pattern between pin 12. (TEO) of IC801 and pins 46 and 47 of IC802. Is it normal ?

No → IC801 is faulty.

Yes → Check the PWB pattern between pin 50 (TEO) of IC802 and pin 18 of IC804. Check the periphery of IC804 and BI801/CNS801. If OK. Optical pickup failure.

Yes



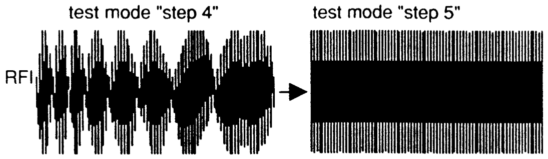
Is output (HF signal) obtained at the pin 38 (RFI) of IC802 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Is output obtained at the pins 1 and 3, 4 of BI802/CNS802.

No → Optical pickup failure.

Yes → Check the periphery of IC801. Check the PWB pattern between pin 19 (RFGO) of IC801 and pins 38 (RFI) of IC802. If OK. IC801 is faulty

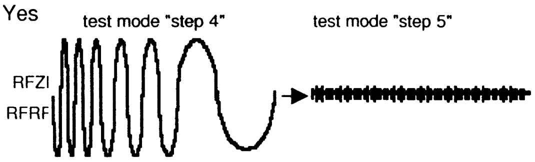
Yes



Is output (HF signal) obtained at the pins 41 (RFZI) and 42 (RFRP) of IC802 when the CD TEST MODE "STEP 4" is changed to "STEP 5"?

No → Check the periphery of IC801. Check the PWB pattern between pin17 (RFRP) of IC801 and pins 41 (RFZI) and 42 (RFRP) of IC802. If OK. IC801 is faulty.

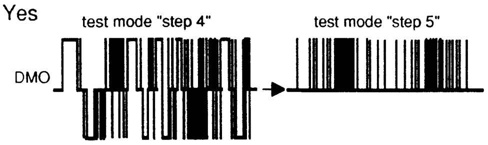
Yes



Is the following wave output to the pin 55 (DMO) of IC802 when the CD TEST MODE "STEP 4" or "STEP 5"?

No → Check the periphery pins 28~32 of IC802. If OK. IC802 failure.

Yes



Normal.

• No sound.

No sound from both L and R-ch?

No → Check the interval between the pins 82 or 85 of IC802 and the pins 1 or 3 IC601.

Yes

Is +4.5V applied to pin 83 (DVDD) of IC802?

No → Check the PWB pattern between R819 and Q861.

Yes

Is signal of pins 82 and 85 of IC802 output?

No → Check the peripheral parts of IC802. If OK, IC802 is faulty.

Yes

The main PWB is faulty.

• Track search failure

Does the sled motor run in FF/REW state when the SERVO TEST MODE "STEP1" is set?

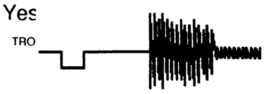
No → Check as stated in item "SLED MOTOR OPERATION FAILURE".

Yes

Is the following wave output to the pin 49 (TRO) of IC802 during track search in normal playback?

No → IC802 failure.

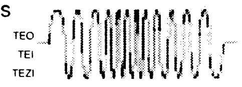
Yes



Is the following wave output to the pins 12 (TEO) of IC801 during track search in normal playback?

No → Check the PWB pattern between pin 49 (TRO) of IC802 and pin 18 of IC804.
Check the PWB pattern between pins 20 and 21 of IC804 and Optical pickup.
If OK. Optical pickup faiiure.

Yes



Is the above wave output to the pins 46 (TEI) and 47 (TEZ) of IC802 during track serch in normal playback?

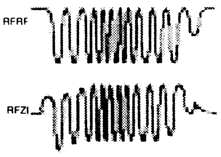
No → Check the PWB pattern between pin 12 (TEO) of IC801 and pins 46 and 47 of IC802. If OK. IC801 failure.

Yes

Is the following wave output to the pin 41 (RFZI) and 42 (RFRP) of IC802 during track search in normal playback?

No → Check the PWB pattern between pin 17 (RFO) and 18 (RFIS), 19 (RFRP) of IC801 and pins 41 and 42 of IC802. If OK. IC801 failure.

Yes



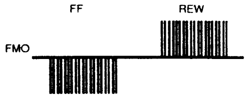
Normal.

• Sled motor operation failure.

Is following sled feed signal output the pin 53 (FMO) of IC802 when FF/REW key is pressed after the CD TEST MODE "STEP 1" is seted?

No → C801 is faulty.

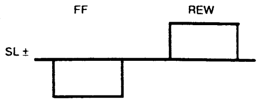
Yes



Is following sled feed signal output the pins 12 and 13 of IC804 when FF/REW key is pressed after the CD TEST MODE "STEP 1" is seted?

No → Check the PWB pattern between pin 53 of IC802 and pins 12 and 13 of IC804.

Yes



Is sled feed signal output the pins 10 and 11 of IC804?

No → Check the peripheral parts of IC804. If OK, IC804 is faulty.

Yes

Is sled feed voltage applied between both terminals of sled motor?

No → Check the BI803/CNS803.

Yes

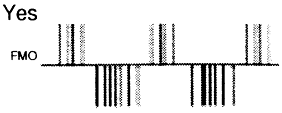
Check the CD mechanism (periphery of sled motor).
If the sled motor does not run when DC2.0V is applied to both terminals of sled motor, the sled motor is faulty.

• Sled servo failure.

Is following sled signal output the pin 53 (FMO) of IC802 during playback?

No → IC802 is faulty.

Yes



Normal.

FUNCTION TABLE OF IC

IC401 VHiM62495FP-1: Audio Processor (M62495FP)

Pin No.	Port Name	Function
1	IN A1	It is the input terminal of the channel 1
2	IN B1	It is the input terminal of the channel 1
3	IN C1	It is the input terminal of the channel 1
4	IN D1	It is the input terminal of the channel 1
5*	IN E1	It is the input terminal of the channel 1 Independent control (from chA to D) is possible. Simultaneous ON use is enabled. When only chE is set to on, set Selector ALL OFF mode
6	SELO1	Selector COM output terminal of channel 1
7	VOLI1	Volume input terminal of channel 1
8	TONEH1	Channel 1 treble frequency adjusting terminal
9	TONEL1	Channel 1 bass frequency, gain adjusting terminal
10	OUT1	Channel 1 output terminal
11	GND	GND terminal
12	VDD	Positive power terminal
13	CONT	Microcomputer data input terminal
14	VSS	Negative power terminal
15	OUT1	Channel 2 output terminal
16	TONEL2	Channel 2 bass frequency, gain adjusting terminal
17	TONEH2	Channel 2 treble frequency adjusting terminal
18	VOLI2	Volume input terminal of channel 2
19	SELO2	Selector COM output terminal of channel 2
20*	IN E2	It is the input terminal of the channel 2. Independent control (from chA to D) is possible. Simultaneous ON use is enabled. When only chE is set to on, set Selector ALL OFF mode.
21	IN D2	Input terminal of channel 2
22	IN C2	Input terminal of channel 2
23	IN B2	Input terminal of channel 2
24	IN A2	Input terminal of channel 2

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC401 VHiM62495FP-1: Audio Processor (M62495FP)

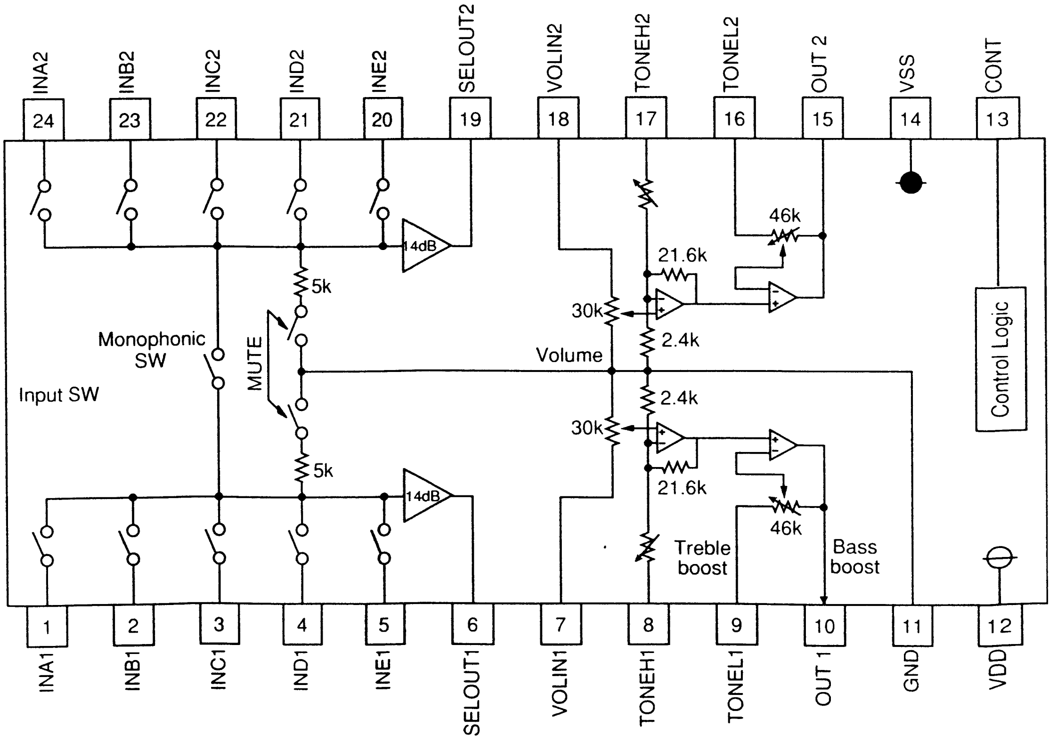

INA2
INB2
INC2
IND2
INE2
SELOUT2
VOLIN2
TONEH2
TONEL2
OUT 2
VSS
CONT
24
23
22
21
20
19
18
17
16
15
14
13
14dB
5k
Monophonic SW
MUTE
Input SW
46k
21.6k
30k
2.4k
Volume
2.4k
30k
21.6k
46k
Control Logic
5k
14dB
Treble boost
Bass boost
1
2
3
4
5
6
7
8
9
10
11
12
INA1
INB1
INC1
IND1
INE1
SELOUT1
VOLIN1
TONEH1
TONEL1
OUT 1
GND
VDD

Figure 42 BLOCK DIAGRAM OF IC

IC701 RH-iX0014SJZZ: System Microcomputer (IX0014SJ) (1/2) (Serial No. 904xxxxx)
IC701 RH-iX0021SJZZ: System Microcomputer (IX0021SJ) (1/2) (Serial No. 905xxxxx~)

Pin No.	Terminal Name	Input/Output	Function
1-4	COM3-COM0	Output	LCD common output terminal
5-7	VLC3-VLC1	—	LCD power terminal
8	VDD	—	Microcomputer power +5V
9	OSC2	Output	Main clock oscillator connection terminal f=8MHz
10	OSC1	Input	An oscillation child connection terminal for the main clock f=8MHz
11	VSS	—	Microcomputer power GND
12	XI	Input	Sub-clock oscillator connection terminal f=32.768kHz
13	XO	Output	Sub-clock oscillator connection terminal f=32.768kHz
14	MMOD	Input	Memory mode selection terminal
15	VREF-	—	AD converter power GND
16	KEY0 AN0/PA0	Input	Destination detection input Acts as an A/D input port. When reset,it detects the destination setting according to DC voltage.
17	KEY1 AN0/PA1	Input	Operation button input, max. 8 buttons
18	KEY2 AN0/PA2	Input	Operation button input, max. 8 buttons
19	KEY3 AN0/PA3	Input	Model detection input H: XL-560/570 L: XL-540
20	KEY4 AN0/PA4	Input	Tuner signal meter (S meter) voltage input terminal
21	KEY5 AN0/PA5	Input	Cassette tape safety lug detection input "H" = Record inhibited "L" = Record enabled
22	KEY6 AN0/PA6	Input	Tape running/END detection input If pulse input is detected, it is judged that the tape is running.
23	KEY7 AN7/PA7	Input	Cassette mechanism operation state detection input "H" = Mechanism stopped "L" = Mechanism is operating
24	VREF+	—	A/D converter power +5V
25	TXD SBO0/P00	Output	Terminal to output data to TUNER PLL IC
26	RXD SBI0/P01	Input	Data input from TUNER PLL IC
27	SBT0/P02	Output	Output of clock synchronizing with TUNER PLL IC
28	SBO1/P03	Output	Terminal 1 to output data to VOL IC
29*	SBI1/P04	—	
30	SBT1/P05	Output	POWER IC STANDBY terminal control
31	DK/BZER P06	Output	Enable output of TUNER PLL IC "L" = OFF "H" = ON
32	RST/P27	Input	Reset signal input
33	RMOUT	Input	CLOCK/TIMER/SLEEP button input
34	P11	Output	Power mute output "H" = MUTE OFF "L" = MUTE ON
35	TM2IO P12	Output	Main TRANS RELAY CONTROL "H" = ON "L" = OFF
36	TM3IO P13	Output	CD servo power circuit control output "H" = CD power ON "L" = CD power OFF
37	TM4IO P14	Input	Power button input detection
38	IRQ0 P20	Input	Power failure detection input. When "L" is set, the mode is changed to HALT mode.
39	SENS IRQ1/P21	Input	Remote control signal input
40	IRQ2 P22	Input	Input of clock synchronizing with RDS IC
41	IRQ3 P23	Input	Jog dial UP pulse input
42	IRQ4	Input	Jog dial DOWN pulse input
43	P30	Input	RDS signal reception state detection "H" = RDS not received "L" = RDS is being received
44	P31	Input	Data input from RDS IC
45	P32	Output	TC9462F reset signal output
46	LED0 WE/P50	Output	TC9462F chip enable terminal "L" = Bus terminal active
47	LED1 RE/P51	Output	TC9462F data sync clock output
48	LED2 CS/P52	Output	Tuner mute output "H" = Mute ON "L" = Mute OFF
49	LDE3/S51 A16/P53	Output	LCD backlight control signal output 1 Added "H" = Backlight ON "L" = Backlight OFF
50*	LED4/S50 A17/P54	—	
51	SEG49 P60/A0	Output	Cassette mechanism solenoid drive control output

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0014SJZZ: System Microcomputer (IX0014SJ) (2/2) (Serial No. 904xxxxx)
IC701 RH-iX0021SJZZ: System Microcomputer (IX0021SJ) (2/2) (Serial No. 905xxxxx~)

Pin No.	Terminal Name	Input/Output	Function
52	SEG48 P61/A1	Output	Cassette mechanism motor drive control output
53	SEG47 P62/A2	Output	Tape circuit record/playback selection output "H" = Record mode "L" = Playback mode
54	SEG46 P63/A3	Output	Record bias oscillation frequency selection control output
55	SEG45 P64/A4	Output	Record bias oscillation circuit control output "H" = Bias oscillation "L" = Start stop
56	SEG44 P65/A5	Input	CD lid state detection input "L" = Lid closed "H" = Lid opened
57	SEG43 P66/A6	Input	CD pickup position detection SW input "L" = Innermost periphery
58	SEG42 P67/A7	Output	CD servo control IC ON/OFF output terminal "H" = Servo ON "L" = Servo standby 2 Changed
59-62	SEG41 P70/A8- SEG38 P73/A11	Input/Output	TC9462F control data input/output terminal
63	SEG37 P74/A12	Output	SURROUND control output
64*	SEG36 P75/A13	—	
65	SEG35 P76/A14	Input	Radio stereo broadcast reception detection input "L" = During stereo broadcast reception
66	SEG34 P77/A15	Input	Broadcast reception state detection input "L" = During broadcast wave reception
67	SEG33 P87/D7	—	LCD segment output.
68	SEG32 P86/D6	—	LCD segment output.
69-74	SEG31 P85/D5- SEG26 P80/D0	—	LCD segment output Note: Since RH-IX0015SJZZ is 24-pin LCD, SEG0 of LCD is connected to SEG7 of microcomputer output terminal, with subsequent successive connection (up to SEG26).
75-100	SEG25-SEG0	—	LCD segment output Note: Since RH-IX0015SJZZ is 24-pin LCD, SEG0 of LCD is connected to SEG7 of microcomputer output terminal, with subsequent successive connection (up to SEG26).

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0014SJZZ: System Microcomputer (IX0014SJ) (Serial No. 904xxxxx)
IC701 RH-iX0021SJZZ: System Microcomputer (IX0021SJ) (Serial No. 905xxxxx~)

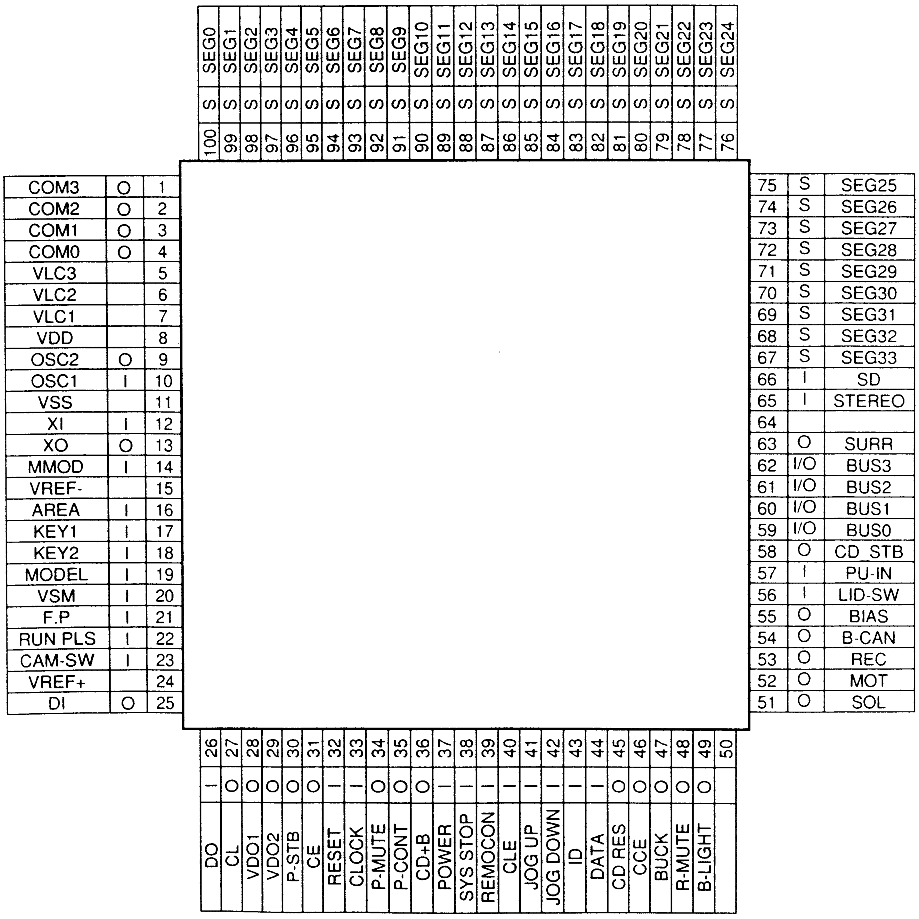
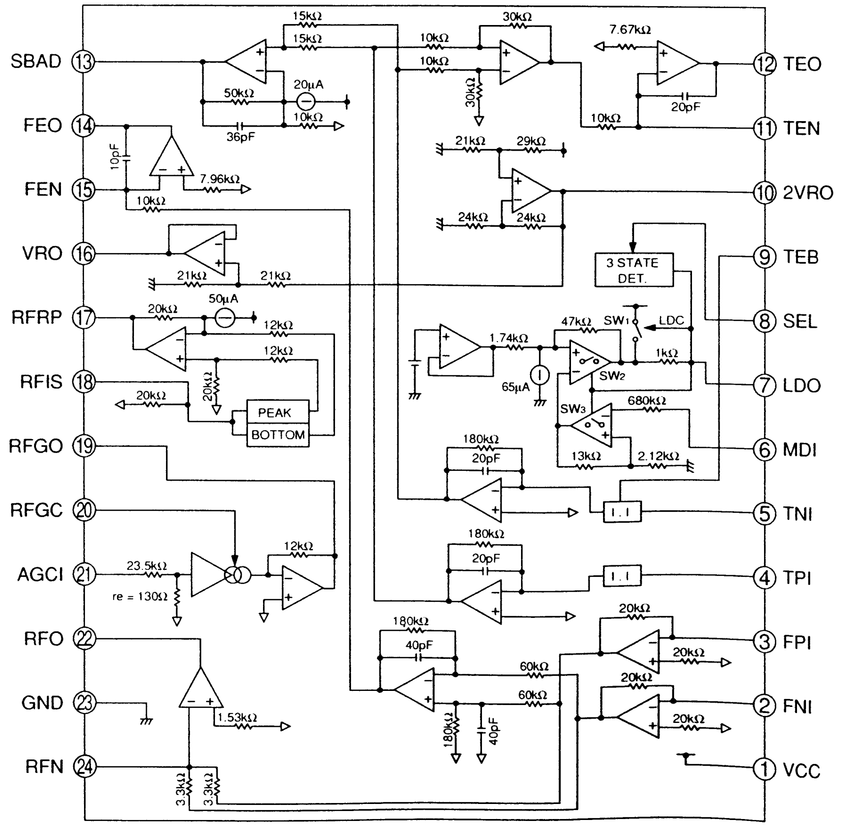

SEG0 S 100
SEG1 S 99
SEG2 S 98
SEG3 S 97
SEG4 S 96
SEG5 S 95
SEG6 S 94
SEG7 S 93
SEG8 S 92
SEG9 S 91
SEG10 S 90
SEG11 S 89
SEG12 S 88
SEG13 S 87
SEG14 S 86
SEG15 S 85
SEG16 S 84
SEG17 S 83
SEG18 S 82
SEG19 S 81
SEG20 S 80
SEG21 S 79
SEG22 S 78
SEG23 S 77
SEG24 S 76
COM3 O 1
COM2 O 2
COM1 O 3
COM0 O 4
VLC3 5
VLC2 6
VLC1 7
VDD 8
OSC2 O 9
OSC1 I 10
VSS 11
XI I 12
XO O 13
MMOD I 14
VREF- 15
AREA I 16
KEY1 I 17
KEY2 I 18
MODEL I 19
VSM I 20
F.P I 21
RUN PLS I 22
CAM-SW I 23
VREF+ 24
DI O 25
75 S SEG25
74 S SEG26
73 S SEG27
72 S SEG28
71 S SEG29
70 S SEG30
69 S SEG31
68 S SEG32
67 S SEG33
66 I SD
65 I STEREO
64
63 O SURR
62 I/O BUS3
61 I/O BUS2
60 I/O BUS1
59 I/O BUS0
58 O CD STB
57 I PU-IN
56 I LID-SW
55 O BIAS
54 O B-CAN
53 O REC
52 O MOT
51 O SOL
26 I DO
27 O CL
28 O VDO1
29 O VDO2
30 O P-STB
31 O CE
32 I RESET
33 I CLOCK
34 O P-MUTE
35 O P-CONT
36 O CD+B
37 I POWER
38 I SYS STOP
39 I REMOCON
40 I CLE
41 I JOG UP
42 I JOG DOWN
43 I ID
44 I DATA
45 O CD RES
46 O CCE
47 O BUCK
48 O R-MUTE
49 O B-LIGHT
50

Figure 44 BLOCK DIAGRAM OF IC

IC801 VHiTA2109F/-1:Servo Pre Amp. (TA2109F)

Pin No.	Terminal Name	Input/Output	Function
1	VCC	—	Power voltage terminal
2	FNI	Input	Main beam amp input terminal
3	FPI	Input	Main beam amp input terminal
4	TPI	Input	Sub-beam amp input terminal
5	TNI	Input	Sub-beam amp input terminal
6	MDI	Input	Monitor photodiode amp input terminal
7	LDO	Output	Laser diode amp output terminal
8	SEL	Input	Laser diode control signal input and APC circuit ON/OFF signal input terminal
9	TEB	Input	Tracking error balance adjustment signal input terminal To be controlled by 3-value PWM signal. (PWM carrier = 88.2 kHz)
10	2VRO	Output	Standard voltage (2VR) output terminal. When Vcc = 5V, 2VR = 4.2V.
11	TEN	Input	Tracking error signal generation amp reversed phase input terminal
12	TEO	Output	Tracking error signal generation amp output terminal
13	SBAD	Output	Sub-beam addition signal output terminal
14	FEO	Output	Focus error signal generation amp output terminal
15	FEN	Input	Focus error signal generation amp reversed phase input terminal
16	VRO	Output	Standard voltage (VR) output terminal. When Vcc = 5V, VR = 2.1V.
17	RFRP	Output	Track count signal generation amp output terminal
18	RFIS	Input	RFRP detection circuit input terminal
19	RFGO	Output	RF signal output terminal
20	RFGC	Input	RF amplitude adjustment control signal input terminal The amplitude of RF signal can be controlled by using the 3-value PWM signal (PWM carrier = 88.2 kHz) which is output from the RFGC terminal of TC9432F.
21	AGCI	Input	RF signal amplitude adjustment amp input terminal
22	RFO	Output	RF signal generation amp output terminal
23	GND	—	GND terminal
24	RFN	Input	RF reversed phase input terminal

IC801 VHiTA2109F/-1:Servo Pre Amp. (TA2109F)


SBAD ⑬
FEO ⑭
FEN ⑮
VRO ⑯
RFRP ⑰
RFIS ⑱
RFGO ⑲
RFGC ⑳
AGCI ㉑
RFO ㉒
GND ㉓
RFN ㉔
⑫ TEO
⑪ TEN
⑩ 2VRO
⑨ TEB
⑧ SEL
⑦ LDO
⑥ MDI
⑤ TNI
④ TPI
③ FPI
② FNI
① VCC
15kΩ
15kΩ
30kΩ
7.67kΩ
10kΩ
10kΩ
50kΩ
20μA
10kΩ
36pF
30kΩ
20pF
10kΩ
10pF
7.96kΩ
10kΩ
21kΩ
29kΩ
24kΩ
24kΩ
21kΩ
21kΩ
3 STATE DET.
50μA
20kΩ
12kΩ
12kΩ
47kΩ
SW1
LDC
1.74kΩ
1kΩ
SW2
65μA
20kΩ
20kΩ
PEAK
BOTTOM
SW3
680kΩ
180kΩ
20pF
13kΩ
2.12kΩ
1:1
180kΩ
20pF
1:1
12kΩ
23.5kΩ
re = 130Ω
180kΩ
40pF
20kΩ
20kΩ
60kΩ
60kΩ
20kΩ
20kΩ
1.53kΩ
180kΩ
40pF
3.3kΩ
3.3kΩ

SEL	LDC		
	SW1	SW2	SW3
L	ON	OFF	OFF
HiZ	OFF	ON	ON
H	OFF	ON	ON

Figure 45 BLOCK DIAGRAM OF IC

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (1/3)

<table>
<tr><th>Pin No.</th><th>Port Name</th><th>Input/Output</th><th>Function</th></tr>
<tr><td>1*</td><td>TEST0</td><td>Input</td><td>Test mode terminal. To be opened usually.</td></tr>
<tr><td>2*
3*</td><td>/HSO
/UHSO</td><td>Output
Output</td><td>Playback speed mode flag output terminal.
<table>
<tr><th>/UHSO</th><th>/HSO</th><th>Playback speed</th></tr>
<tr><td>H</td><td>H</td><td>x1 speed playback</td></tr>
<tr><td>H</td><td>L</td><td>x2 speed playback</td></tr>
<tr><td>L</td><td>H</td><td>x4 speed playback</td></tr>
<tr><td>L</td><td>L</td><td>—</td></tr>
</table></td></tr>
<tr><td>4*</td><td>EMPH</td><td>Output</td><td>Sub-code Q data emphasis flag output terminal. "H": Emphasis ON "L": Emphasis OFF
The output polarity can be inverted by command.</td></tr>
<tr><td>5*</td><td>LRCK</td><td>Output</td><td>Channel clock (44.1 kHz) output terminal. "L": L channel "H": R channel
The output polarity can be inverted by command.</td></tr>
<tr><td>6</td><td>VSS</td><td>—</td><td>Digital ground terminal.</td></tr>
<tr><td>7</td><td>BCK</td><td>Output</td><td>Bit clock (1.4122 MHz) output terminal.</td></tr>
<tr><td>8*</td><td>AOUT</td><td>Output</td><td>Audio data output terminal.</td></tr>
<tr><td>9</td><td>DOUT</td><td>Output</td><td>Digital out output terminal.</td></tr>
<tr><td>10*</td><td>MBOV</td><td>Output</td><td>Buffer memory over signal output terminal. "H": Over</td></tr>
<tr><td>11*</td><td>IPF</td><td>Output</td><td>Correction flag output terminal.
"H": When AOUT output is correction-disabled symbol in case of C2 correction output.</td></tr>
<tr><td>12*</td><td>SBOK</td><td>Output</td><td>Sub-code Q data CRCC judgment result output terminal. "H": When judgment result is OK.</td></tr>
<tr><td>13*</td><td>CLCK</td><td>Input/Output</td><td>Sub-code P-W data read clock output/input terminal. Selectable with command bit.</td></tr>
<tr><td>14</td><td>VDD</td><td>—</td><td>Digital + power terminal.</td></tr>
<tr><td>15</td><td>VSS</td><td>—</td><td>Digital ground terminal.</td></tr>
<tr><td>16*</td><td>DATA</td><td>Output</td><td>Sub-code P-W data output terminal.</td></tr>
<tr><td>17*</td><td>SFSY</td><td>Output</td><td>Playback system frame sync signal output terminal.</td></tr>
<tr><td>18*</td><td>SBSY</td><td>Output</td><td>Sub-code block sync output terminal. "H": On S1 position when the sub-code sync is detected.</td></tr>
<tr><td>19*</td><td>SPCK</td><td>Output</td><td>Processor status signal read clock (176.4 kHz) output terminal.</td></tr>
<tr><td>20*</td><td>SPDA</td><td>Output</td><td>Processor status signal output terminal.</td></tr>
<tr><td>21*</td><td>COFS</td><td>Output</td><td>Correction system frame clock (7.35 kHz) output terminal.</td></tr>
<tr><td>22*</td><td>MONIT</td><td>Output</td><td>LSI internal signal monitor terminal.
It is possible to monitor the DSP internal flag and PLL system clock with the microcomputer command. Terminal for serial output of text data according to command.</td></tr>
<tr><td>23</td><td>VDD</td><td>—</td><td>Digital + power terminal.</td></tr>
<tr><td>24</td><td>TESIO0</td><td>Input</td><td>Test input/output terminal. To be fixed to "L" usually.
Terminal to input the text data read clock according to command.</td></tr>
<tr><td>25</td><td>P2VREF</td><td>—</td><td>2VREF terminal for PLL system.</td></tr>
<tr><td>26*</td><td>HSSW</td><td>Output</td><td>VREF voltage in case of x2 speed/x4 speed.</td></tr>
<tr><td>27*</td><td>ZDET</td><td>Output</td><td>1-bit DAC zero detection flag output terminal.</td></tr>
<tr><td>28</td><td>PDO</td><td>Output</td><td>Terminal to output the phase difference between EFM signal and PLCK signal.</td></tr>
<tr><td>29*</td><td>TMAXS</td><td>Output</td><td>TMAX detection result output terminal. To be selected with command bit TMPS.</td></tr>
<tr><td>30</td><td>TMAX</td><td>Output</td><td>TMAX detection result output terminal. To be selected with command bit TMPS.
<table>
<tr><th>TMAX detection result</th><th>TMAX output</th></tr>
<tr><td>Longer than specific period</td><td>"P2VREF"</td></tr>
<tr><td>Shorter than specific period</td><td>"VSS"</td></tr>
<tr><td>Within specific period</td><td>"HIZ"</td></tr>
</table></td></tr>
<tr><td>31</td><td>LPFN</td><td>Input</td><td>Low-pass filter amp inverted input terminal.</td></tr>
<tr><td>32</td><td>LPFO</td><td>Output</td><td>Low-pass filter amp output terminal.</td></tr>
<tr><td>33</td><td>PVREF</td><td>—</td><td>VREF terminal for PLL system.</td></tr>
<tr><td>34</td><td>VCOREF</td><td>Input</td><td>VCO center frequency standard level terminal. To be fixed to PVref usually.</td></tr>
<tr><td>35</td><td>VCOF</td><td>Output</td><td>VCO filter terminal.</td></tr>
<tr><td>36</td><td>AVSS</td><td>—</td><td>Analog system ground terminal.</td></tr>
<tr><td>37</td><td>SLCO</td><td>Output</td><td>Data slice level generation DAC output terminal.</td></tr>
<tr><td>38</td><td>RFI</td><td>Input</td><td>RF signal input terminal.</td></tr>
</table>

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (2/3)

Pin No.	Port Name	Input/Output	Function
39	AVDD	—	Analog system power terminal.
40	RFCT	Input	RFRP signal center level input terminal.
41	RFZI	Input	RFRP zero cross input terminal.
42	RFIP	Input	RF ripple signal input terminal.
43	FEI	Input	Focus error signal input terminal.
44	SBAD	Input	Sub-beam addition signal input terminal.
45	TSIN	Input	Test input terminal. To be fixed to Vref usually.
46	TEI	Input	Tacking error input terminal. (Tracking servo ON: Taking-in).
47	TEZI	Input	Tracking error, zero cross input termina.l
48	FOO	Output	Focus equalizer output terminal.
49	TRO	Output	Tracking equalizer output terminal.
50	VREF	—	Analog standard power terminal.
51	RFGC	Output	RF amplitude adjustment control signal output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
52	TEBC	Output	Tracking balance control signal output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
53	FMO	Output	Feed equalizer output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
54*	FVO	Output	Speed error signal or feed search EQ output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
55	DMO	Output	Disc equalizer output terminal. 3-value PWM signal is output. (PWM carrier = DSP system 88.2 kHz, sync with PXO)
56	2VREF	—	Analog standard power terminal (2xVREF)
57	SEL	Output	APC circuit ON/OFF signal output terminal. When laser is ON and UHS = L, "Hi-Z". When UHS = H, "H" output is obtained.
58*	FLGA	Output	Internal signal monitor external flag output terminal. TEZC, FOON, FOK and RFZC signals can be selected with command.
59*	FLGB	Output	Internal signal monitor external flag output terminal. DFCT, FOON, FMON and RFZC signals can be selected with command.
60*	FLGC	Output	Internal signal monitor external flag output terminal. TRON, TRSR, FOK, and SRCH signals can be selected with command.
61*	FLGD	Output	Internal signal monitor external flag output terminal. TRON, DMON, HYS and SHC signals can be selected with command.
62	VDD	—	Digital + power terminal.
63	VSS	—	Digital ground terminal.
64* 65* 66* 67*	IO0 IO1 IO2 IO3	Input/Output	General-use I/O port. The input port and output port can be selected with command. In case of input port the terminal state (H/L) can be read with the read command. In case of output port the terminal state (H/L/HiZ) can be controlled with command.
68*	/DMOUT	Input	Terminal to set the mode to output 2-value PWM of feed equalizer from IO0,1 terminal and 2-value PWM of disc equalizer from IO2,3 terminal. "L" active
69*	/CKSE	Input	To be opened usually.
70*	/DACT	Input	DAC test mode terminal. To be opened usually.
71	TESIN	Input	Test input terminal (externally provided VCO clock input terminal). To be fixed to "L" usually.
72	TESIO1	Input	Test input/output terminal. To be fixed to "L" usually.
73	VSS	—	Digital ground terminal.
74	PXI	Input	DSP system clock oscillation circuit input terminal. To be fixed to "L" usually.
75*	PXO	Output	DSP system clock oscillation circuit output terminal.
76	VDD	—	Digital + power terminal.
77	XVSS	—	System clock oscillation circuit ground terminal.
78	XI	Input	System clock oscillation input terminal.
79	XO	Output	System clock oscillation circuit output terminal.
80	XVDD	—	System clock oscillation circuit + power terminal.
81	DVSR	—	R channel D/A converting section power terminal.
82	RO	Output	R channel data forward rotation output terminal.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (3/3)

Pin No.	Port Name	Input/Output	Function
83	DVDD	—	D/A converting section power terminal.
84	DVR	—	Reference voltage terminal.
85	LO	Output	L channel data forward rotation output terminal.
86	DVSL	—	L channel D/A converting section power terminal.
87*	TEST1	Input	Test mode terminal. To be opened usually.
88*	TEST2	Input	Test mode terminal. To be opened usually.
89*	TEST3	Input	Test mode terminal. To be opened usually.
90-93	BUS0-BUS3	Input/Output	Microcomputer interface data input/output terminal.
94	VDD	—	Digital + power terminal.
95	VSS	—	Digital ground terminal.
96	BUCK	Input	Microcomputer interface clock input terminal.
97	/CCE	Input	Microcomputer interface chip enable signal input terminal. "L": BUS0 to 3 is active.
98*	TEST4	Input	Test mode termina. To be opened usually.
99*	/TSMOD	Input	Local test mode selection terminal.
100	/RST	Input	Reset signal input terminal. "L": Reset.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F)

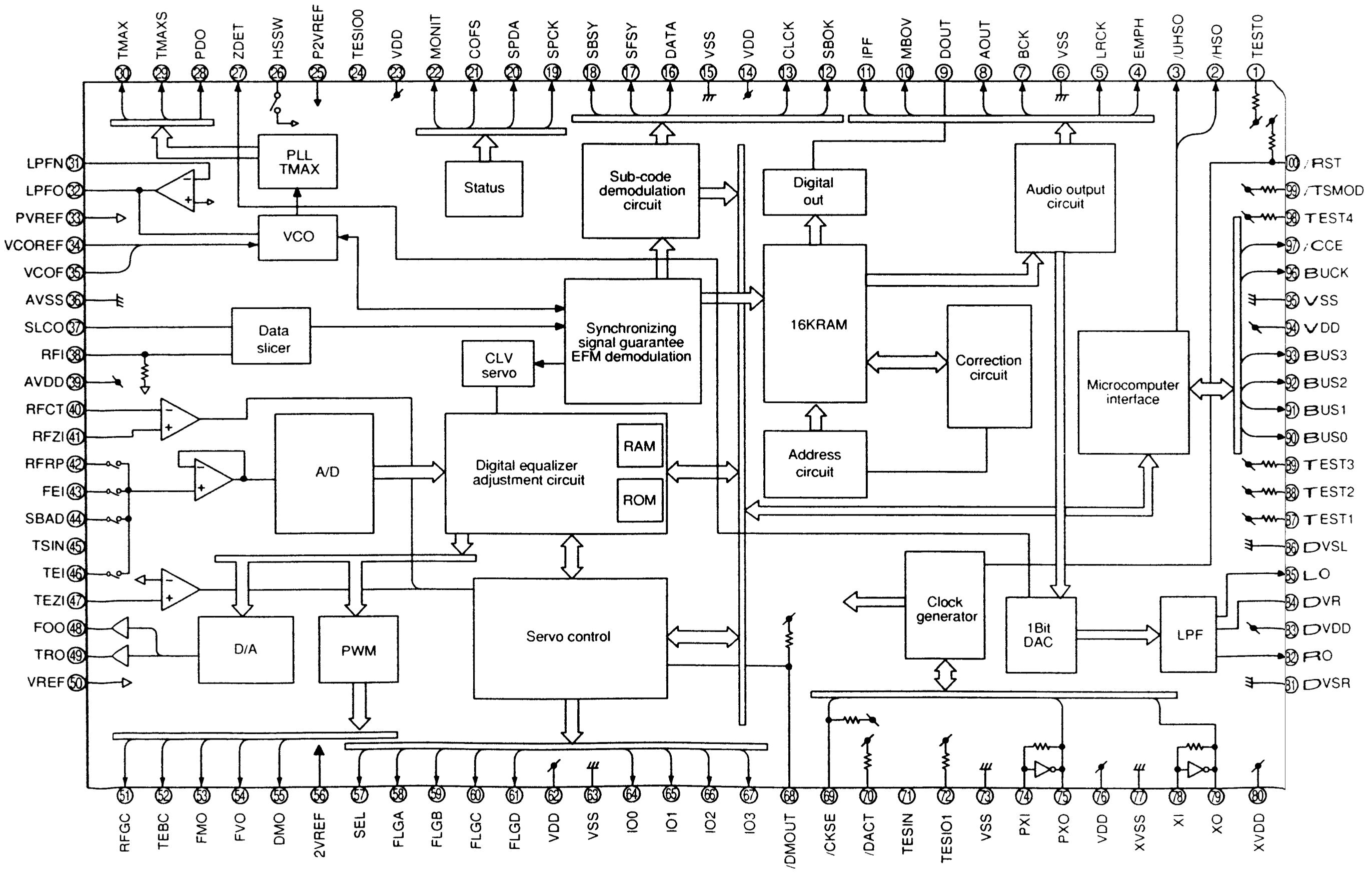

TMAX ㉚
TMAXS ㉙
PDO ㉘
ZDET ㉗
HSSW ㉖
P2VREF ㉕
TESIO0 ㉔
VDD ㉓
MONIT ㉒
COFS ㉑
SPDA ⑳
SPCK ⑲
SBSY ⑱
SFSY ⑰
DATA ⑯
VSS ⑮
VDD ⑭
CLCK ⑬
SBOK ⑫
IPF ⑪
MBOV ⑩
DOUT ⑨
AOUT ⑧
BCK ⑦
VSS ⑥
LRCK ⑤
EMPH ④
/UHSO ③
/HSO ②
TEST0 ①
LPFN ㉛
LPFO ㉜
PVREF ㉝
VCOREF ㉞
VCOF ㉟
AVSS ㊱
SLCO ㊲
RFI ㊳
AVDD ㊴
RFCT ㊵
RFZI ㊶
RFRP ㊷
FEI ㊸
SBAD ㊹
TSIN ㊺
TEI ㊻
TEZI ㊼
FOO ㊽
TRO ㊾
VREF ㊿
PLL TMAX
VCO
Status
Sub-code demodulation circuit
Digital out
Audio output circuit
Data slicer
CLV servo
Synchronizing signal guarantee EFM demodulation
16KRAM
Correction circuit
Microcomputer interface
A/D
Digital equalizer adjustment circuit
RAM
ROM
Address circuit
Servo control
Clock generator
1Bit DAC
LPF
D/A
PWM
(100) /RST
(99) /TSMOD
(98) TEST4
(97) /CCE
(96) BUCK
(95) VSS
(94) VDD
(93) BUS3
(92) BUS2
(91) BUS1
(90) BUS0
(89) TEST3
(88) TEST2
(87) TEST1
(86) DVSL
(85) LO
(84) DVR
(83) DVDD
(82) RO
(81) DVSR
(51) RFGC
(52) TEBC
(53) FMO
(54) FVO
(55) DMO
(56) 2VREF
(57) SEL
(58) FLGA
(59) FLGB
(60) FLGC
(61) FLGD
(62) VDD
(63) VSS
(64) IO0
(65) IO1
(66) IO2
(67) IO3
(68) /DMOUT
(69) /CKSE
(70) /DACT
(71) TESIN
(72) TESIO1
(73) VSS
(74) PXI
(75) PXO
(76) VDD
(77) XVSS
(78) XI
(79) XO
(80) XVDD

Figure 48 BLOCK DIAGRAM OF IC

IC804 VHiLA6541D/-1: Focus/Tracking/Spin/Slide Driver (LA6541D)

Pin No.	Port Name	Function
1	VCC	Power (short-circuited to pin 30)
2	MUTE	All BTL AMP output ON/OFF
3	VIN1	BTL AMP1 input terminal
4	VG1	BTL AMP1 input terminal (for gain adjustment)
5	VO1	BTL AMP1 output terminal (noninversion side)
6	VO2	BTL AMP1 output terminal (inversion side)
7	GND	GND terminal (lowest potential)
8	GND	GND terminal (lowest potential)
9	GND	GND terminal (lowest potential)
10	VO3	Output terminal of BTL AMP2 (inversion side)
11	VO4	Output terminal of BTL AMP2 (noninversion side)
12	VG2	Input terminal of BTL AMP2 (for gain adjustment)
13	VIN2	Input terminal of BTL AMP2
14	REG OUT	Connect the collector of externally provided transistor (PNP). 5V power output
15	REG IN	Connect the base of externally provided transistor (PNP).
16*	RES	Reset output
17*	CD	Reset output delay time setting (capacitor provided externally)
18	VIN3	Input terminal of BTL AMP3
19*	VG3	Input terminal of BTL AMP3 (for gain adjustment)
20	VO5	Output terminal of BTL AMP3 (noninversion side)
21	VO6	Output terminal of BTL AMP3 (inversion side)
22	GND	GND terminal (lowest potential)
23	GND	GND terminal (lowest potential)
24	GND	GND terminal (lowest potential)
25	VO7	Output terminal of BTL AMP4 (inversion side)
26	VO8	Output terminal of BTL AMP4 (noninversion side)
27	VG4	Input terminal of BTL AMP4 (for gain adjustment)
28	VIN4	Input terminal of BTL AMP4
29	VREF	Application of standard voltage of level shift circuit
30	VCC	Power (short-circuited to pin 1)

*GND (lowest potential) is connected to the frame of pin center.
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC804 VHiLA6541D/-1: Focus/Tracking/Spin/Slide Driver (LA6541D)

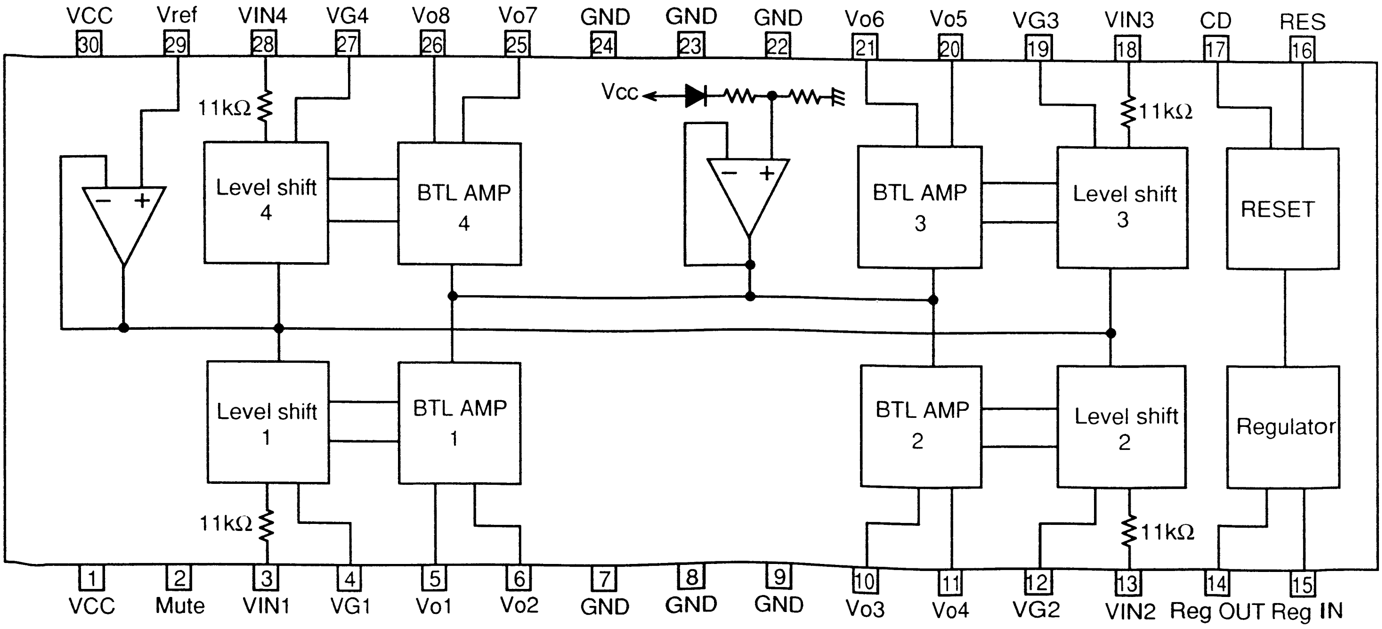
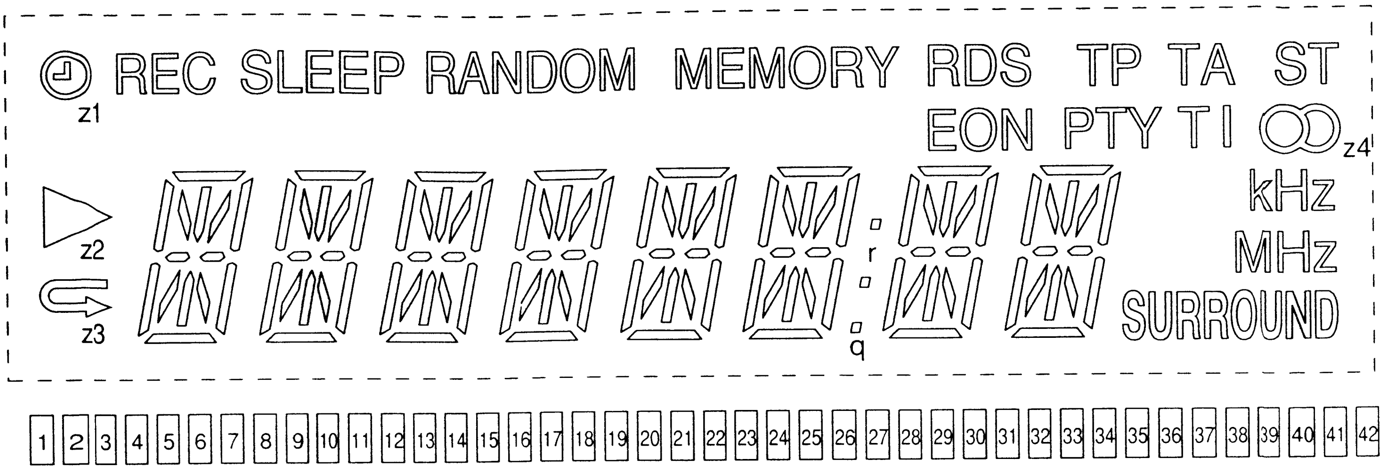

VCC 30
Vref 29
VIN4 28
VG4 27
Vo8 26
Vo7 25
GND 24
GND 23
GND 22
Vo6 21
Vo5 20
VG3 19
VIN3 18
CD 17
RES 16
11kΩ
Vcc
Level shift 4
BTL AMP 4
BTL AMP 3
Level shift 3
RESET
Level shift 1
BTL AMP 1
BTL AMP 2
Level shift 2
Regulator
11kΩ
11kΩ
11kΩ
1 VCC
2 Mute
3 VIN1
4 VG1
5 Vo1
6 Vo2
7 GND
8 GND
9 GND
10 Vo3
11 Vo4
12 VG2
13 VIN2
14 Reg OUT
15 Reg IN

Figure 49 BLOCK DIAGRAM OF IC

LCD701 RV-LX0003SJZZ: LCD Display


REC
SLEEP
RANDOM
MEMORY
RDS
TP
TA
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EON
PTY
TI
z4
kHz
z2
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z3
q
SURROUND
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PinNo	com1	com2	com3	com4
1	com1			
2		com2		
3			com3	
4				com4
5	z1	b1	c1	z2
6	h1	j1	l1	k1
7	g1	n1	m1	d1
8	a1	p1	f1	e1
9	REC	b2	c2	z3
10	h2	j2	l2	k2
11	g2	n2	m2	d2
12	a2	p2	f2	e2
13	SLEEP	b3	c3	MHz
14	h3	j3	l3	k3
15	g3	n3	m3	d3
16	a3	p3	f3	e3
17	RANDOM	b4	c4	kHz
18	h4	j4	l4	k4
19	g4	n4	m4	d4
20	a4	p4	f4	e4
21	MEMORY	b5	c5	z4
22	h5	j5	l5	k5
23	g5	n5	m5	d5
24	a5	p5	f5	e5
25	RDS	b6	c6	ST
26	h6	j6	l6	k6
27	g6	n6	m6	d6
28	a6	p6	f6	e6
29	r	b7	c7	q
30	h7	j7	l7	k7
31	g7	n7	m7	d7
32	a7	p7	f7	e7
33	TP	b8	c8	
34	h8	j8	l8	k8
35	g8	n8	m8	d8
36	a8	p8	f8	e8
37	EON	PTY	TI	TA
38				SRS(0)
39				com4
40			com3	
41		com2		
42	com1			

Figure 50 LCD SEGMENT

SHARP PARTS GUIDE

MODEL XL-560H/E
XL-570H/E

XL-560H micro component system consisting of XL-560H micro component system and CP-XL560H speaker system.
XL-570H micro component system consisting of XL-570H micro component system and CP-XL570H speaker system.
XL-560E micro component system consisting of XL-560E micro component system and CP-XL560H speaker system.
XL-570E micro component system consisting of XL-570E micro component system and CP-XL570H speaker system.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free:
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC	Ceramic type
VCK	Ceramic type
VCT	Semiconductor type
VC • • MF	Cylindrical type (without lead wire)
VC • • MN	Cylindrical type (without lead wire)
VC • • TV	Square type (without lead wire)
VC • • TQ	Square type (without lead wire)
VC • • CY	Square type (without lead wire)
VC • • CZ	Square type (without lead wire)
VC • • • • • • • • • J	The 13th character represents capacity difference. ("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%, "C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD	Carbon-film type
VRS	Carbon-film type
VRN	Metal-film type
VR • • MF	Cylindrical type (without lead wire)
VR • • MN	Cylindrical type (without lead wire)
VR • • TV	Square type (without lead wire)
VR • • TQ	Square type (without lead wire)
VR • • CY	Square type (without lead wire)
VR • • CZ	Square type (without lead wire)
VR • • • • • • • • • J	The 13th character represents error. ("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

XL-560H/E,570H/E

INTEGRATED CIRCUITS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
IC101	VHIBA3126N/-1	J	AF	Head Selector,BA3126N
IC102	VHIBA3311L/-1	J	AK	Playback and Record/ Playback Amp.,BA3311L
IC201	VHIKIA4558P-1	J	AC	Surround Control,KIA4558P [XL-560H/570H Only]
IC302	VHILC72131/-1	J	AP	PLL Controller,LC72131
IC303	VHILA1832//-1	J	AR	FM IF DET./FM MPX./AM IF, LA1832
IC401	VHIM62495FP-1	J	AV	Audio Processor,M62495FP
IC521	VHILA2232//-1	J	AX	RDS Decoder,LA2232 [XL-560H/570H Only]
IC601	VHILA4450//-1	J	AH	Power Amp.,LA4450
IC701	RH-IX0014SJZZ	J	BD	System Microcomputer, IX0014SJ [Serial No.904×××××]
IC701	RH-IX0021SJZZ	J	BB	System Microcomputer, IX0021SJ[SerialNo.905×××××~]
IC801	VHITA2109F/-1	J	AL	Servo Pre Amp.,TA2109F
IC802	VHITC9462F/-1	J	AZ	Servo/Signal Control,TC9462F
IC804	VHILA6541D/-1	J	AW	Focus/Tracking/Spin/ Slide Driver,LA6541D

TRANSISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
Q101~106	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q107	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q151	VS2SC2001-K-1	J	AD	Silicon,NPN,2SC2001 K
Q152	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q153	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q154,155	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q171	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q172	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q201	VS2SK246GR/-1	J	AB	FET,2SK246 GR [XL-560H/570H Only]
Q203	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M [XL-560H/570H Only]
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q351	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q401	VS2SD468-C/-1	J	AD	Silicon,NPN,2SD468 C
Q501,502	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M [XL-560H/570H Only] [Serial No.904××××× Only]
Q521	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR [XL-560H/570H Only]
Q601~603	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q604,605	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q606	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q607	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q608	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q609	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q681,682	VS2SD468-C/-1	J	AD	Silicon,NPN,2SD468 C
Q683	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q702,703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q705	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M
Q706	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q707	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q801	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q861	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q901	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q902	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q903	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q904	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q905	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q906	VSKRA102M//-1	J	AC	Digital,PNP,KRA102 M

DIODES

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
D101,102	VHD1N4148//-1	J	AA	Silicon,1N4148
D104~106	VHD1N4148//-1	J	AA	Silicon,1N4148
D201	VHD1N4148//-1	J	AA	Silicon,1N4148 [XL-560H/570H Only]
D301~304	VHD1N4148//-1	J	AA	Silicon,1N4148
D601~604	VHD1N4148//-1	J	AA	Silicon,1N4148
D611~614	VHD1N4004//-1	J	AB	Silicon,1N4004
⚠D651~654	VHD1N5402M/-1	J	AE	Silicon,1N5402M
⚠D656~659	VHD1N4004//-1	J	AB	Silicon,1N4004
⚠D681~684	VHD1N4004//-1	J	AB	Silicon,1N4004
D685	VHD1N4004//-1	J	AB	Silicon,1N4004
D701~712	VHPL1154GDA-1	J	AD	LED,Green,L1154GDA
D718	VHD1N4004//-1	J	AB	Silicon,1N4004
D720~723	VHD1N4148//-1	J	AA	Silicon,1N4148
D901~904	VHD1N4148//-1	J	AA	Silicon,1N4148
VD301	VHCKV1236Z23F	J	AS	Variable Capacitance, KV1236Z23F
ZD351	VHEMTZJ5R1B-1	J	AC	Zener,5.1V,MTZJ5.1B
ZD401	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B
ZD521	VHEMTZJ5R1B-1	J	AC	Zener,5.1V,MTZJ5.1B [XL-560H/570H Only]
ZD601	VHEMTZJ130A-1	J	AC	Zener,13V,MTZJ13A
ZD602	VHEMTZJ7R5C-1	J	AC	Zener,7.5V,MTZJ7.5C
ZD681	VHEMTZJ6R8A-1	J	AA	Zener,6.8V,MTZJ6.8A
ZD682	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B
ZD701	VHEMTZJ3R3B-1	J	AA	Zener,3.3V,MTZJ3.3B

FILTERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
CF301,302	RFILF0072AFZZ	J	AG	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0003SJZZ	J	AF	AM IF
FE301	RTUNS0012AWZZ	J	AV	FM Front End
L354	RFILL0001AWZZ	J	AE	Low Pass Filter
X351	RCRM-0007SJZZ	J	AG	VCO,456 kHz

TRANSFORMERS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
T302	RCILA0007SJZZ	J	AG	AM Antenna
T306	RCILB0009SJZZ	J	AG	AM Oscillation
T351	RCILI0004SJZZ	J	AF	AM IF
⚠T651	RTRNP0026SJZZ	J	BF	Power,Main
⚠T681	RTRNP0025SJZZ	J	AU	Power,Sub

COILS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
L151	VP-MK331K0000	J	AB	330 µH,Choke
L341	RBLN-0001AWZZ	J	AD	Balun
L342	VP-DH2R2K0000	J	AB	2.2 mH,Peaking
L351,352	VP-DH101K0000	J	AB	100 µH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L521	VP-DH2R2K0000	J	AB	2.2 mH,Peaking [XL-560H/570H Only]
L601,602	RCILZ0001SJZZ	J	AD	0.3 mH
L603	VP-DH100K0000	J	AB	10 µH,Choke
L701	VP-DH101K0000	J	AB	100 µH,Choke
L802	VP-XHR82K0000	J	AC	0.82 µH,Choke
⚠LF651	RCILZ0002SJZZ	J	AG	Line Filter

VARIABLE RESISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
VR351	RVR-M0999AFZZ	J	AB	10 kohm (B),Semi-VR [FM Mute Level]
VR521	RVR-M0997AFZZ	J	AB	4.7 kohms (B),SemiVR [RDS] [XL-560H/570H Only]

VIBRATORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
X352	RCRSP0003SJZZ	J	AL	Crystal,4.5 MHz
X521	RCRM-0006SJZZ	J	AF	Ceramic,456 kHz [XL-560H/570H Only]
X701	RCRM-0008SJZZ	J	AG	Ceramic,8 MHz
X702	RCRSP0011AWZZ	J	AC	Crystal,32.768 kHz
X801	RCRSP0002SJZZ	J	AL	Crystal,16.93 MHz

CAPACITORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C101,102	VCKYTV1HB102K	J	AA	0.001 µF,50V
C103,104	VCKYTV1HB331K	J	AA	330 pF,50V
C105,106	VCKYTV1HB271K	J	AA	270 pF,50V
C107,108	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C109,110	VCQYKA1HM153J	J	AB	0.015 µF,50V,Mylar
C111,112	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C113,114	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C115,116	VCKYTV1HB222K	J	AA	0.0022 µF,50V
C117	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C118	VCKYTV1EF223Z	J	AA	0.022 µF,25V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C119,120	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C121,122	VCCSTV1HL820J	J	AA	82 pF,50V
C123	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C124	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C125	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C126	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic
C129,130	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C131	VCKYBT1HB821K	J	AA	820 pF,50V
C151	VCKYTV1HB181K	J	AB	180 pF,50V
C152	VCKYTV1HB102K	J	AA	0.001 µF,50V
C153	VCQPKA2AA392J	J	AB	0.0039 µF,100V,Polypropylene
C154	VCQYKA1HM273J	J	AB	0.027 µF,50V,Mylar
C155	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C156	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C201,202	VCKYTV1HB562K	J	AA	0.0056 µF,50V [XL-560H/570H Only]
C203,204	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic [XL-560H/570H Only]
C208	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic [XL-560H/570H Only]
C209	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic [XL-560H/570H Only]
C211,212	VCKYTV1HB332K	J	AA	0.0033 µF,50V [XL-560H/570H Only]
C213,214	RC-GZA475AF1H	J	AB	4.7 µF,50V,Electrolytic [XL-560H/570H Only]
C215,216	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic [XL-560H/570H Only]
C301,302	VCKYTV1HB102K	J	AA	0.001 µF,50V
C330	VCCUPA1HJ8R0D	J	AA	8 pF (UJ),50V
C331	VCKYTV1EF473Z	J	AB	0.047 µF,25V
C332,333	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C334	VCCUTV1HJ180J	J	AA	18 pF (UJ),50V
C335	VCCCTV1HH180J	J	AA	18 pF (CH),50V
C336	VCKYTV1HB471K	J	AA	470 pF,50V
C337	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C340	VCKYTV1HB102K	J	AA	0.001 µF,50V
C341	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C343,344	VCCSTV1HL330J	J	AA	33 pF,50V
C345~347	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C348	RC-GZA107AF1C	J	AB	100 µF,16V,Electrolytic
C350,351	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C352	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C353,354	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C355	VCCSTV1HL220J	J	AA	22 pF,50V
C356	VCKYTV1HB102K	J	AA	0.001 µF,50V
C357	RC-GZA225AF1H	J	AB	2.2 µF,50V,Electrolytic
C358	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C360,361	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C362	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C363	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C364	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C365	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C366	VCKYTV1HB102K	J	AA	0.001 µF,50V
C367,368	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C369	VCCSTV1HL560J	J	AA	56 pF,50V
C370~372	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX153K	J	AA	0.015 µF,16V
C380	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C381	VCCCTV1HH120J	J	AA	12 pF (CH),50V
C382	VCCCTV1HH150J	J	AA	15 pF (CH),50V
C383	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C384	VCKYTV1HB102K	J	AA	0.001 µF,50V
C385	VCKYTV1HB103K	J	AA	0.01 µF,50V
C386	VCKYTV1HB331K	J	AA	330 pF,50V
C387	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C391	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C392	VCKYTV1HB102K	J	AA	0.001 µF,50V
C393	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C394	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C395	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C396	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C397	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C398	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C399	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C401~408	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C411,412	VCKYTV1HB331K	J	AA	330 pF,50V
C415~418	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C419,420	VCKYTV1HB333K	J	AA	0.033 µF,50V
C421~424	VCKYTV1EF224Z	J	AA	0.22 µF,25V
C425,426	RC-GZA474AF1H	J	AA	0.47 µF,50V,Electrolytic
C428	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C430	RC-GZA477AF1A	J	AC	470 µF,10V,Electrolytic
C431	VCKYTV1HB101K	J	AA	100 pF,50V
C432	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C433	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C434	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C521	RC-GZA226AF1C	J	AB	22 µF,16V,Electrolytic [XL-560H/570H Only]
C522,523	VCKYTV1HB332K	J	AA	0.0033 µF,50V [XL-560H/570H Only]
C524	VCKYTV1EF103Z	J	AA	0.01 µF,25V [XL-560H/570H Only]
C525	VCKYTV1EF223Z	J	AA	0.022 µF,25V [XL-560H/570H Only]
C526~528	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic [XL-560H/570H Only]
C530	VCKYTV1EF223Z	J	AA	0.022 µF,25V [XL-560H/570H Only]
C531	VCTYPA1CX333K	J	AA	0.033 µF,16V [XL-560H/570H Only]
C532	VCKYTV1HB682K	J	AA	0.0068 µF,50V [XL-560H/570H Only]
C533	VCTYPA1CX333K	J	AA	0.033 µF,16V [XL-560H/570H Only]
C534	VCKYTV1EF223Z	J	AA	0.022 µF,25V [XL-560H/570H Only]
C535	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic [XL-560H/570H Only]
C536,537	VCKYTV1EF223Z	J	AA	0.022 µF,25V [XL-560H/570H Only]
C543	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic [XL-560H/570H Only]
C601	RC-GZA336AF1C	J	AB	33 µF,16V,Electrolytic
C602	RC-GZA105AF1H	J	AB	1 µF,50V,Electrolytic
C603,604	VCKYPA1HB101K	J	AA	100 pF,50V
C605,606	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic
C607,608	RC-GZA227AF1E	J	AB	220 µF,25V,Electrolytic
C609,610	RC-GZA476AF1H	J	AB	47 µF,50V,Electrolytic
C611,612	RC-QZA224AFYJ	J	AB	0.22 µF,50V,Mylar
C613,614	RC-GZV108AF1V	J	AD	1000 µF,35V,Electrolytic
C615	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C616	RC-GZW228AF1H	J	AH	2200 µF,50V,Electrolytic
C617,618	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C620	RC-GZV477AF1E	J	AC	470 µF,25V,Electrolytic
C621	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C622	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C623	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C624	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C625	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C626	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C627	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C628	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C629	RC-GZV227AF1H	J	AC	220 µF,50V,Electrolytic
C630	RC-GZW478AF1E	J	AG	4700 µF,25V,Electrolytic
C632,633	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C636,637	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C639,640	VCKYPA1HB471K	J	AA	470 pF,50V
C643,644	RC-QZA224AFYJ	J	AB	0.22 µF,50V,Mylar
C647	VCKYBT1HB331J	J	AA	330 pF,50V
C648	VCKYPA1HB122K	J	AA	0.0012 µF,50V
⚠ C651	VCFYDA1HA104J	J	AB	0.1 µF,50V,Thin Film
⚠ C654	VCFYDA1HA104J	J	AB	0.1 µF,50V,Thin Film
⚠ C656~659	VCFYDA1HA104J	J	AB	0.1 µF,50V,Thin Film
C660	VCKYPA1HB102K	J	AA	0.001 µF,50V
C661~663	VCKYPA1HB821K	J	AA	820 pF,50V
⚠ C681,682	VCFYDA1HA473J	J	AB	0.047 µF,50V,Thin Film
C683	RC-GZV228AF1C	J	AG	2200 µF,16V,Electrolytic
C684	VCFYDA1HA473J	J	AB	0.047 µF,50V,Thin Film
C685	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C686	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C688	VCKYPA1HF223Z	J	AB	0.022 µF,50V
C689	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C693,694	VCKYPA1HB331K	J	AA	330 pF,50V
C695,696	VCKYPA1HB102K	J	AA	0.001 µF,50V
C701,702	VCCCTV1HH220J	J	AA	22 pF (CH),50V
C703,704	VCKYTV1EF223Z	J	AA	0.022 µF,25V
C705,706	VCKYTV1HB102K	J	AA	0.001 µF,50V
C707	RC-GZA475AF1E	J	AB	4.7 µF,25V,Electrolytic [Serial No.904xxxxx Only]
C710	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C711	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C712	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C713	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic

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C714	VCKYTV1HB561K	J	AA	560 pF,50V
C715	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C801	VCCSPA1HL101J	J	AA	100 pF,50V
C802	VCKYTV1EB153K	J	AB	0.015 µF,25V
C803	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C804	VCKYTV1EB103K	J	AA	0.01 µF,25V
C805	VCKYTV1HB272K	J	AA	0.0027 µF,50V
C806	VCKYTV1HB472K	J	AA	0.0047 µF,50V
C807	VCKYTV1EB333K	J	AB	0.033 µF,25V
C809,810	VCKYTV1HB102K	J	AA	0.001 µF,50V
C811	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C812	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C813	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C817~819	VCKYTV1EB104K	J	AA	0.1 µF,25V
C820	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C821	VCKYTV1EB104K	J	AA	0.1 µF,25V
C822	RC-GZA227AF1A	J	AB	220 µF,10V,Electrolytic
C823	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C824,825	VCKYTV1EB563K	J	AA	0.056 µF,25V
C826,827	VCCCTV1HH150J	J	AA	15 pF (CH),50V
C828,829	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C830	VCKYTV1EB563K	J	AA	0.056 µF,25V
C831,832	RC-GZA106AF1C	J	AB	10 µF,16V,Electrolytic
C833,834	VCKYTV1HB471K	J	AA	470 pF,50V
C835	VCKYTV1EB563K	J	AA	0.056 µF,25V
C836	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C837	VCKYPA1HB471K	J	AA	470 pF,50V
C838	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C839	VCCSTV1HL2R0C	J	AA	2 pF,50V
C840,841	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C842	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C843	VCKYTV1EF104Z	J	AA	0.1 µF,25V
C844	VCKYTV1HB682K	J	AA	0.0068 µF,50V
C845	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C846,847	VCKYTV1EB104K	J	AA	0.1 µF,25V
C848	VCCSPA1HL390J	J	AA	39 pF,50V
C849	VCKYTV1EB563K	J	AA	0.056 µF,25V
C850	RC-GZA227AF1A	J	AB	220 µF,10V,Electrolytic
C851	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C852	VCQYKA1HM222K	J	AA	0.0022 µF,50V,Mylar
C855	RC-GZA107AF1A	J	AB	100 µF,10V,Electrolytic
C857	RC-GZA476AF1C	J	AB	47 µF,16V,Electrolytic
C858	VCKYTV1EF103Z	J	AA	0.01 µF,25V
C859	RC-GZA227AF1A	J	AB	220 µF,10V,Electrolytic
C860	VCKYTV1EF104Z	J	AA	0.1 µF,25V
C861	VCKYBT1HB102K	J	AA	0.001 µF,50V
C862	VCKYPA1HB102K	J	AA	0.001 µF,50V
C863	VCKYTV1HB221K	J	AA	220 pF,50V
C864	RC-GZA476AF1A	J	AB	47 µF,10V,Electrolytic
C887	VCKYTV1HB102K	J	AA	0.001 µF,50V
C901	VCKYTV1HB102K	J	AA	0.001 µF,50V
C902	RC-GZA335AF1H	J	AB	3.3 µF,50V,Electrolytic
C903	RC-GZA107AF1E	J	AB	100 µF,25V,Electrolytic
C904,905	VCKYPA1HF223Z	J	AB	0.022 µF,50V

RESISTORS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	VRS-TV2AB000J	J	AA	0 ohm,Jumper,1.25×2mm,Green
R70A,B	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R70C	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R70E	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R70F	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R70G	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R70H,J	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R70K	VRS-TV2AB121J	J	AA	120 ohms,1/10W
R70L	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R70M	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R80A,B,C	VRS-TV2AB823J	J	AA	82 kohms,1/10W
R80E	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R80F	VRS-TV2AB823J	J	AA	82 kohms,1/10W
R80G	VRD-ST2CD823J	J	AA	82 kohms,1/6W
R101,102	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R103,104	VRS-TV2AB121J	J	AA	120 ohms,1/10W
R105	VRS-TV2AB154J	J	AA	150 kohms,1/10W
R106	VRD-ST2CD154J	J	AA	150 kohms,1/6W
R107	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R108	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R109,110	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W
R111	VRD-ST2EE222J	J	AA	2.2 kohms,1/4W
R112	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R113,114	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R115,116	VRS-TV2AB153J	J	AA	15 kohms,1/10W
R117,118	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R119,120	VRS-TV2AB101J	J	AA	100 ohm,1/10W
R121~124	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W
R125	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R126	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R127,128	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W
R129,130	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R131	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R132	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W
R133	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R134	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R135	VRS-TV2AB684J	J	AA	680 kohms,1/10W
R136	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R137	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W
R138	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R139	VRD-ST2EE272J	J	AA	2.7 kohms,1/4W
R140	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R141	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R151	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R152	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R153,154	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R155	VRD-ST2EE560J	J	AA	56 ohms,1/4W
R156,157	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R159,160	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R201	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W [XL-560H/570H Only]
R202	VRS-TV2AB822J	J	AA	8.2 kohms,1/10W [XL-560H/570H Only]
R203,204	VRS-TV2AB104J	J	AA	100 kohm,1/10W [XL-560H/570H Only]
R205,206	VRS-TV2AB103J	J	AA	10 kohm,1/10W [XL-560H/570H Only]
R207	VRS-TV2AB473J	J	AA	47 kohms,1/10W [XL-560H/570H Only]
R208	VRD-ST2EE331J	J	AA	330 ohms,1/4W [XL-560H/570H Only]
R209,210	VRS-TV2AB103J	J	AA	10 kohm,1/10W [XL-560H/570H Only]
R211	VRS-TV2AB272J	J	AA	2.7 kohms,1/10W [XL-560H/570H Only]
R212	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W [XL-560H/570H Only]
R213~216	VRS-TV2AB123J	J	AA	12 kohms,1/10W [XL-560H/570H Only]
R217	VRD-ST2CD123J	J	AA	12 kohms,1/6W [XL-560H/570H Only]
R218	VRS-TV2AB123J	J	AA	12 kohms,1/10W [XL-560H/570H Only]
R319	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R321	VRD-ST2EE220J	J	AA	22 ohms,1/4W
R323	VRS-TV2AB683J	J	AA	68 kohms,1/10W
R324	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R336	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R343	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R344	VRS-TV2AB681J	J	AA	680 ohms,1/10W
R345	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W
R346	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R347	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R348	VRS-TV2AB681J	J	AA	680 ohms,1/10W
R349	VRS-TV2AB330J	J	AA	33 ohms,1/10W
R350	VRS-TV2AB272J	J	AA	2.7 kohms,1/10W
R351	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R352	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R353	VRS-TV2AB271J	J	AA	270 ohms,1/10W
R355	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R356	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R357	VRS-TV2AB474J	J	AA	470 kohms,1/10W
R358	VRS-TV2AB822J	J	AA	8.2 kohms,1/10W
R359	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R360	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R361,362	VRS-TV2AB123J	J	AA	12 kohms,1/10W
R363	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R364	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R365	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R369A	VRS-TV2AB680J	J	AA	68 ohms,1/10W
R369B	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R371~374	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R376	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R377	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R379	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R381	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R382	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R383	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R384	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R386	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R393	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R395	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R405,406	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R407,408	VRS-TV2AB152J	J	AA	1.5 kohms,1/10W
R415~422	VRS-TV2AB152J	J	AA	1.5 kohms,1/10W
R423~430	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R435,436	VRS-TV2AB103J	J	AA	10 kohm,1/10W [XL-560E/570E Only]
R437,438	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R439,440	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R441,442	VRS-TV2AB391J	J	AA	390 ohms,1/10W
R443	VRS-TV2AB123J	J	AA	12 kohms,1/10W
R444,445	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R446	VRD-ST2EE820J	J	AA	82 ohms,1/4W
R447	VRD-ST2EE471J	J	AA	470 ohms,1/4W
R448	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R449	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R450	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R451~453	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R501	VRS-TV2AB103J	J	AA	10 kohm,1/10W [XL-560H/570H Only] [Serial No.904××××× Only]
R521	VRD-ST2CD102J	J	AA	1 kohm,1/6W [XL-560H/570H Only]
R522	VRS-TV2AB102J	J	AA	1 kohm,1/10W [XL-560H/570H Only]
R523	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W [XL-560H/570H Only]
R524	VRD-ST2CD154J	J	AA	150 kohms,1/6W [XL-560H/570H Only]
R525	VRD-ST2CD103J	J	AA	10 kohm,1/6W [XL-560H/570H Only]
R526	VRD-ST2CD223J	J	AA	22 kohms,1/6W [XL-560H/570H Only]
R527	VRS-TV2AB564J	J	AA	560 kohms,1/10W [XL-560H/570H Only]
R528,529	VRD-ST2CD102J	J	AA	1 kohm,1/6W [XL-560H/570H Only]
R532	VRS-TV2AB103J	J	AA	10 kohm,1/10W [XL-560H/570H Only]
R533	VRD-ST2CD563J	J	AA	56 kohms,1/6W [XL-560H/570H Only]
R534	VRS-TV2AB563J	J	AA	56 kohms,1/10W [XL-560H/570H Only]
R548,549	VRD-ST2EE391J	J	AA	390 ohms,1/4W [XL-560H/570H Only]
R601,602	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R603,604	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R605,606	VRD-ST2CD820J	J	AA	82 ohms,1/6W
R607	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W
R608	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R609,610	VRD-ST2EE3R3J	J	AA	3.3 ohms,1/4W
R613,614	VRD-RT2HD271J	J	AA	270 ohms,1/2W
R615,616	VRD-ST2CD391J	J	AA	390 ohms,1/6W
R617	VRS-TV2AB333J	J	AA	33 kohms,1/10W
R619,620	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R621	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R623	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R624	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R625	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R627	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R628	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R629	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R631,632	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R633	VRD-ST2EE2R2J	J	AA	2.2 ohms,1/4W
R634	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R651	VRS-VV3LA681J	J	AC	680 kohms,3W,Metal Oxide Film
R661,662	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R680	VHHRXE030//-1	J	AN	1 ohm,Semicondactor
R681	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R682	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R683	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R684	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R685	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R686	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R701A,B,C	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R702A,B,C	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R703A,B,C	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R704A,B,C	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R707	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R708	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R709	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W
R710	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R711,712	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R713	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R714	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R715	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R716	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W
R717	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W
R718	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R719,720	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
R721	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R722	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R723~725	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R726	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R727	VRS-TV2AB123J	J	AA	12 kohms,1/10W [XL-560E/570E]
R727	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W [XL-560H/570H]
R728	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R729	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R730~732	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R733	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R734~739	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R740	VRS-TV2AB102J	J	AA	1 kohm,1/10W [XL-560H/570H Only]
R741~746	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R747	VRS-TV2AB471J	J	AA	470 ohms,1/10W
R749~751	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R752	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R753	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R754	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R755~757	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R758	VRS-TV2AB102J	J	AA	1 kohm,1/10W [XL-560H/570H Only]
R759~761	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R762,763	VRS-TV2AB102J	J	AA	1 kohm,1/10W [XL-560H/570H Only]
R764~767	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R769	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R770~776	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R777	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R778~781	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R782	VRS-TV2AB102J	J	AA	1 kohm,1/10W [XL-560H/570H Only]
R784,785	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R787	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R788	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R789	VRD-ST2CD473J	J	AA	47 kohms,1/6W [XL-560H/570H Only]
R791,792	VRD-ST2CD473J	J	AA	47 kohms,1/6W [XL-560H/570H Only]
R793,794	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R795	VRS-TV2AB473J	J	AA	47 kohms,1/10W [XL-560H/570H Only]
R796	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R798	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R799	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R801	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R802	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R804	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R806	VRS-TV2AB153J	J	AA	15 kohms,1/10W
R807	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R808	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R809	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R810	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R811	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R812	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R813	VRD-ST2EE100J	J	AA	10 ohm,1/4W
R814	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R815,816	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R817,818	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R819	VRD-ST2CD221J	J	AA	220 ohms,1/6W
R820	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R821	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R822	VRD-ST2EE220J	J	AA	22 ohms,1/4W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R823	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R824	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R825	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R826	VRS-TV2AB272J	J	AA	2.7 kohms,1/10W
R827	VRS-TV2AB273J	J	AA	27 kohms,1/10W
R828	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R829	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R851	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R852~855	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R861~863	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R901	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R902	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R903	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R904	VRS-TV2AB271J	J	AA	270 ohms,1/10W
R905	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R906	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R907	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R908	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R909	————		—	Lead Jumper [Serial No.905xxxxx~]
R909	VRD-ST2CD102J	J	AA	1 kohm,1/6W [Serial No.904xxxxx Only]

OTHER CIRCUITRY PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
BI651/CNS651	QCNWN0129SJZZ	J		Connector Ass'y,2/2Pin
BI652/CNS652	QCNWN0128SJZZ	J		Connector Ass'y,3/3Pin
BI681/CNS681	QCNWN0125SJZZ	J	AE	Connector Ass'y,3/3Pin
BI801/CNS801	QCNWN0120SJZZ	J	AK	Connector Ass'y,8/8Pin
BI802/CNS802	QCNWN0121SJZZ	J	AH	Connector Ass'y,7/7Pin
BI803/CNS803	QCNWN0122SJZZ	J	AH	Connector Ass'y,6/6Pin
BI805/CNS805	QCNWN0130SJZZ	J		Connector Ass'y,3/3Pin
BI901/CNS901	QCNWN0119SJZZ	J	AH	Connector Ass'y,7/7Pin
CFW701	QCNWN0124SJZZ	J	AC	Flat Wire,2Pin
CFW702	QCNWN0123SJZZ	J	AC	Flat Wire,2Pin
CFW901	————		—	Flat Wire,2Pin (Supplies at REF No.PWB-D)
CNP101	QCNCM931HAFZZ	J	AC	Plug,8Pin
CNP301	QCNCM602BAFZZ	J	AA	Plug,2Pin
CNP602	QCNCM010TAWZZ	J	AD	Plug,18Pin [XL-560H/570H]
CNP602,603	QCNCM010QAWZZ	J	AD	Plug,15Pin [XL-560E/570E]
CNP603	QCNCM010RAWZZ	J	AF	Plug,16Pin [XL-560H/570H]
CNP604	QCNCM010NAWZZ	J	AC	Plug,13Pin
CNP652,653	QCNCM998BAFZZ	J	AC	Plug,2Pin
CNP681	QCNCM603CAFZZ	J	AB	Plug,3Pin
CNP803	QCNCM932FAFZZ	J	AC	Plug,6Pin
CNP805	QCNCM999CAFZZ	J	AG	Plug,3Pin
CNP901	————		—	Plug,7Pin (Supplies at REF No.PWB-D)
CNS101	QCNWN0118SJZZ	J	AL	Connector Ass'y,8Pin
CNS602	QCNCW010TAWZZ	J	AE	Socket,18Pin [XL-560H/570H]
CNS602,603	QCNCW010QAWZZ	J	AE	Socket,15Pin [XL-560E/570E]
CNS603	QCNCW010RAWZZ	J	AG	Socket,16Pin [XL-560H/570H]
CNS604	QCNCW010NAWZZ	J	AC	Socket,13Pin
CNW601	QCNWN0127SJZZ	J	AD	Flat Wire,5Pin
⚠ F651	QFS-C322ASJNI	J	AF	Fuse,T3.15A L 250V
⚠ F652	QFS-C132ASJNI	J	AH	Fuse,T1.25A L 250V
J601	QJAKM0001SJZZ	J	AG	Jack,Headphone
J801	VHPGP1F32T/-1	J	AP	Jack,CD Digital Output
LCD701	RV-LX0003SJZZ	J	AZ	LCD Display
M801	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
M802	RMOTV0408AFM3	J	AN	Motor with Chassis [Spindle]
M901(237-9)	9GD192112344	J	AY	Motor with Pulley [Tape]
PH901	————		—	Phote Interrupter (Supplies at REF No.PWB-E)
⚠ RLY681	RRLYD0001SJZZ	J	AQ	Relay
RX701	VHLN64H380A-1	J	AK	Remote Sensor,N64H380A
SO301	QTANC0001SJZZ	J	AF	Socket,FM Antenna
SO401	QSOCJ0003SJZZ	J	AG	Socket,Video/AUX Input
SO601	QTANA0003SJZZ	J	AG	Terminal,Speaker
⚠ SO651	QSOCA0004SJZZ	J	AH	Socket,AC Power Input
SOL901(237-4)	9GD19212118	J	AP	Solenoid Ass'y
SW700	QSW-Z0003AWZZ	J	AH	Switch,Rotary Type [Jog Dial]
SW701	QSW-P0004AWZZ	J	AE	Switch,Push Type [CD Eject]
SW702	QSW-K0005AWZZ	J	AC	Switch,Key Type [Volume/Jog Dial]
SW703	QSW-K0005AWZZ	J	AC	Switch,Key Type [Play]
SW704	QSW-K0005AWZZ	J	AC	Switch,Key Type [Stop]
SW705	QSW-K0005AWZZ	J	AC	Switch,Key Type [Function]
SW706	QSW-K0005AWZZ	J	AC	Switch,Key Type [Band]
SW707	QSW-K0005AWZZ	J	AC	Switch,Key Type [Memory/Set]
SW708	QSW-K0005AWZZ	J	AC	Switch,Key Type [Record Pause/Beat Cancel]
SW710	QSW-K0005AWZZ	J	AC	Switch,Key Type [Fast Forward]
SW711	QSW-K0005AWZZ	J	AC	Switch,Key Type [Rewind]
SW712	QSW-K0005AWZZ	J	AC	Switch,Key Type [Display Mode] [XL-560H/570H Only]
SW713	QSW-K0005AWZZ	J	AC	Switch,Key Type [ASPM] [XL-560H/570H Only]
SW714	QSW-K0005AWZZ	J	AC	Switch,Key Type [EON] [XL-560H/570H Only]
SW715	QSW-K0005AWZZ	J	AC	Switch,Key Type [Programme Type/Traffic Information] [XL-560H/570H Only]
SW716	QSW-K0005AWZZ	J	AC	Switch,Key Type [Surround] [XL-560H/570H Only]
SW717	QSW-K0005AWZZ	J	AC	Switch,Key Type [Bass/Treble]
SW718	QSW-K0005AWZZ	J	AC	Switch,Key Type [On/Stand-by]
SW719	QSW-K0005AWZZ	J	AC	Switch,Key Type [Clock/Timer/Sleep]
SW801	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]
SW901(237-7)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
SW902(237-8)	9GD640101210	J	AE	Switch,Leaf Type [CAM]

CD MECHANISM PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
301	NGERH0586AFZZ	J	AC	Gear,Middle
302	NGERH0587AFZZ	J	AC	Gear,Drive
303	MLEVP1054AFZZ	J	AC	Rail,Guide
304	NSFTM0291AFFW	J	AD	Shaft,Guide
305	PCUSG0613AFZZ	J	AC	Cushion
⚠ 306	DCTRH8002SJ01	J	BP	Pickup Unit Ass'y
306-1	————		—	Pickup Unit (Not Replacement Item)
306-2	NGERR0043AFZZ	J	AC	Gear,Rack
306-3	MSPRC0961AFZZ	J	AA	Spring,Rack
307	PCOVP1333AFSA	J	AF	Cover,Mechanism
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
M801	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
M802	RMOTV0408AFM3	J	AN	Motor with Chassis [Spindle]
SW801	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]

CABINET PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201	CPNLC1029SJ01	J	AY	Front Panel Ass'y [XL-560H/570H]
201	CPNLC1031SJ01	J	AY	Front Panel Ass'y [XL-560E/570E]
201-1	————		—	Front Panel (Not Replacement Item)
201-2	HDECQ0015SJSA	J	AN	Decoration Plate,LCD Display
201-3	PCUSG0003SJZZ	J	AC	Cushion,Leg
202	CDORF0003SJ01	J	AT	Cassette Holder Ass'y [XL-560H/560E]
202	GDORF0004SJ01	J		Cassette Holder Ass'y [XL-570H/570E]
202-1	————		—	Cassette Holder (Not Replacement Item)
202-2	HDECQ0016SJSA	J	AN	Decoration Plate,Cassette Holder
203	CGERH0001SJ01	J	AF	Cassette Holder Damper Gear Ass'y
204	MSPRD0006SJFJ	J	AC	Spring,Cassette Holder
205	GCOVH1001SJSA	J	AD	Cover,Remote Control Sensor
206	JKNBZ0023SJSB	J	AK	Button,Operation,Left
207	JKNBZ0024SJSA	J	AM	Button,Operation,Right [XL-560H/570H]
207	JKNBZ0027SJSB	J	AM	Button,Operation,Right [XL-560E/570E]
208	HDECQ0018SJSB	J	AK	Ring,Jog Dial Knob
209	JKNBK0015SJSB	J	AH	Knob,Jog Dial
210	GCABC1028SJSA	J	AN	Top Cabinet [XL-560H/560E]
210	GCABC1028SJSB	J	AR	Top Cabinet [XL-570H/570E]
211	MLEVP0001SJSA	J	AL	Lever,CD Eject Button
212	GDORT0001SJSA	J	AK	CD Lid [XL-560H/560E]
212	GDORT0002SJSA	J		CD Lid [XL-570H/570E]
213	CGERH0001SJ01	J	AF	CD Lid Gear Ass'y
214	JKNBZ0029SJSA	J	AE	Button,CD Eject [XL-560H/560E]
214	JKNBZ0029SJSB	J	AH	Button,CD Eject [XL-570H/570E]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
215	MSPRD0007SJFJ	J	AD	Spring,CD Lid
216	CHLDM1002SJ01	J	AH	Stabilizer Ass'y
216- 1	————		—	Stabilizer (Not Replacement Item)
216- 2	PMAGF0002AWZZ	J	AE	Magnet,Stabilizer
217	GITAS0001SJSA	J	AL	Side Panel,Left [XL-560H/560E]
217	GITAS0001SJSB	J		Side Panel,Left [XL-570H/570E]
218	GITAS0002SJSA	J	AL	Side Panel,Right [XL-560H/560E]
218	GITAS0002SJSB	J		Side Panel,Right [XL-570H/570E]
219	TLABS0003SJZZ	J	AD	Label,Class 3A
220	TLABS0004SJZZ	J	AC	Label,Laser
221	GCABB1022SJSA	J	AM	Rear Panel
222	PCOVS3001SJFW	J	AG	Bracket,FM/AM Socket/ Speaker Terminal/Video AUX
223	LCHSM0004SJFW	J	AN	Main Chassis
224	LANGF0012SJFW	J	AF	Bracket,Sub Transformer
225	LHLDW1001SJZZ	J	AD	Nylon Band
226	PCOVW1010SJZZ	J	AH	Cover,Power PWB
⚠ 227	QFSHD0001AWZZ	J	AB	Holder,Fuse
228	LANGT0001SJFW	J	AD	Bracket,Main PWB/ CD Servo PWB
229	QCNWN0148SJZZ	J	AD	Lead Wire with Lug
230	PRDAR0018SJFW	J		Heat Sink,Main
231	PCOVS3002SJFW	J	AF	Shield Cover,Main PWB
232	PSHEP0001SJZZ	J	AF	Sheet,LCD Display
233	LHLDZ1010SJSA	J	AE	Holder,LCD Display
234	LHLDZ1011SJSA	J	AD	Holder,LED PWB
235	TSPC-0060SJZZ	J		Label,Specifications [XL-560H]
235	TSPC-0061SJZZ	J	AD	Label,Specifications [XL-560E for U.K.]
235	TSPC-0067SJZZ	J		Label,Specifications [XL-560E for Thailand]
235	TSPC-0068SJZZ	J		Label,Specifications [XL-570H]
235	TSPC-0070SJZZ	J	AF	Label,Specifications [XL-570E for U.K.]
235	TSPC-0075SJZZ	J		Label,Specifications [XL-570E for Thailand]
236	TLABN0043SJZZ	J		Label,SER No. [XL-560H]
236	TLABN0044SJZZ	J		Label,SER No. [XL-560E]
236	TLABN0048SJZZ	J		Label,SER No. [XL-570H]
236	TLABN0049SJZZ	J		Label,SER No. [XL-570E]
237	CMECB0002SJ01	J	BL	Tape Mechanism Ass'y
237- 1	94R19210703	J	AE	Belt,FF/REW
237- 2	9GD19210943	J	AG	Belt,Main
237- 3	94R192104309	J	AG	Pinch Roller Arm Ass'y
237- 4(SOL901)	9GD19212118	J	AP	Solenoid Ass'y
237- 5	9GD62161401	J	AN	Head,Erase
237- 6	94R62010111	J		Head,Record/Playback
237- 7(SW901)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
237- 8(SW902)	9GD640101210	J	AE	Switch,Leaf Type [CAM]
237- 9(M901)	9GD192112344	J	AY	Motor with Pulley [Tape]
237-10(PWB-D)	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
237-11(PWB-E)	9GD192121304	J	AW	Tape Mechanism PWB Ass'y
238	QCNWN0147SJZZ	J	AC	Lead Wire with Lug
239	GCOVD1002SJSA	J	AH	Cover,CD Digital Output Jack
240	HDECQ0019SJSA	J	AG	Panel,CD Lid [XL-570H/570E Only]
241	LANGF0011SJFW	J	AH	Bracket,Sub Heat Sink
242	LANGT0001SJFW	J	AD	Bracket,Power Amp.PWB
243	PRDAR0017SJFW	J		Heat Sink,Sub
244	PCOVP1001SJSA	J	AK	Cover,Sub Heat Sink
601	XJBSF30P10000	J	AA	Screw,ø3×10mm
602	XEBSD25P10000	J	AA	Screw,ø2.5×10mm
603	XJBSD30P08000	J	AA	Screw,ø3×8mm
604	XHBSD30P06000	J	AA	Screw,ø3×6mm
605	XESSD30P10000	J	AA	Screw,ø3×10mm
606	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
607	XEBSF25P08000	J		Screw,ø2.5×8mm
608	XJBSD30P10000	J	AA	Screw,ø3×10mm
609	XHBSD40P06000	J	AA	Screw,ø4×6mm

ACCESSORIES/PACKING PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
⚠ 1	QACCB0001SJ00	J	AW	AC Power Supply Cord [For U.K.]
⚠ 1	QACCE0007AW00	J	AH	AC Power Supply Cord [Except for U.K.]
2	QANTL0002SJZZ	J	AM	AM Loop Antenna
3	QANTW0002SJZZ	J	AH	FM Antenna
4	RRMCG0014SJSA	J	AY	Remote Control [XL-560H/570H]
4	RRMCG0017SJSA	J	AY	Remote Control [XL-560E/570E]
4- 1	GFTAB1021AWSA	J		Battery Lid,Remote Control
5	SPAKA0017SJZZ	J	AM	Packing Add.,Left/Right
6	SPAKC0048SJZZ	J		Packing Case [XL-560H]
6	SPAKC0049SJZZ	J	AU	Packing Case [XL-560E]
6	SPAKC0053SJZZ	J		Packing Case [XL-570H]
6	SPAKC0054SJZZ	J	AU	Packing Case [XL-570E]
7	SPAKP0002SJZZ	J	AD	Polyethylene Sheet,Unit
8	SPAKP0003SJZZ	J	AC	Polyethylene Sheet, AC Power Supply Cord
9	SSAKA0002SJZZ	J	AE	Polyethylene Bag,Accessories
10	TINSE0019SJZZ	J	AU	Operation Manual [XL-560E/570E for U.K.]
10	TINSZ0029SJZZ	J	AT	Operation Manual [XL-560H/570H]
10	TINSZ0033SJZZ	J		Operation Manual [XL-560E/570E for Thailand]
11	TLABM0008SJZZ	J		Label,Feature [XL-570H]
11	TLABM0009SJZZ	J		Label,Feature [XL-560E]
11	TLABM0012SJZZ	J		Label,Feature [XL-570E]
11	TLABM0014SJZZ	J		Label,Feature [XL-560H]
12	TLABN0044SJZZ	J		Label,SER No. [XL-560E]
12	TLABN0049SJZZ	J		Label,SER No. [XL-570E]
13	TLABZ0015SJZZ	J	AC	Label,VJ No.
14	TLABZ0034SJZZ	J	AC	Label,Saving Energy
15	TCADN0001SJZZ	J	AE	R-Card [XL-560E/570E Only]
16	QCNWH0004SJZZ	J		Cord,Speaker [XL-570E/570H Only]
17	TLABN0043SJZZ	J		Label,SER No. [XL-560H]
17	TLABN0048SJZZ	J		Label,SER No. [XL-570H]
18	TLABZ0030SJZZ	J	AC	Label,Ecology [XL-560H/570H Only]

P.W.B. ASSEMBLY (Not Replacement Item) (U.K./Turkey/Thailand Only)

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
PWB-A1~9	DCEKK0005SJ03	J	—	Main/Headphones/LED/Display/ CD Servo/Switch/Washer/ CD Digital/Holder (Combined Ass'y) [XL-560H/570H]
PWB-A1~9	DCEKK0006SJ03	J	—	Main/Headphones/LED/Display/ CD Servo/Switch/Washer/ CD Digital/Holder (Combined Ass'y) [XL-560E/570E]
⚠ PWB-B,2	DCEKJ0005SJ03	J	—	Power/Power Amp. (Combined Ass'y)
PWB-C	QPWBF3895AFZZ	J	AC	CD Motor (PWB Only)
PWB-D	9GD192121303	J	—	Tape Mechanism
PWB-E	9GD192121304	J	—	Tape Mechanism

OTHER SERVICE PART

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner Disc

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SPEAKER BOX PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
701	9GDHSY041SPK01	J	AR	Front Panel Ass'y
702	9GDHSY041SPK02	J	AR	Net Frame Ass'y
703	9GDHSY041SPK03	J	AY	Speaker Box Ass'y
704	9GDHSY041SPK04	J	AK	Spacer Board
705	PCOVZ1003SJSA	J	AG	Cap,Duct
706	9GDHSY041SPK05	J	AH	Duct Pipe
707	9GDHSY041SPK06	J	AK	Cord,Speaker
708	LHLDZ1014SJZZ	J	AG	Holder,Tweeter
709	9GDHSY041SPK07	J	AD	Screw,ø3×12mm
710	9GDHSY041SPK08	J	AG	Screw,ø4×16mm
711	9GDHSY041SPK12	J	AF	Label,Specifications
712	PGUMM0001SJSA	J	AG	Net Catcher
SP601,602	VSP0010PBY94N	J	AX	Speaker,Woofer
SP603,604	RALMB0001SJZZ	J	AH	Speaker,Tweeter

PACKING PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
1	9GDHSY041SPK09	J	AC	Polyethylene Bag,Speaker
2	SPAKA0019SJZZ	J	AL	Packing Add.,Top,Speaker
3	SPAKA0019SJZZ	J	AL	Packing Add.,Bottom,Speaker
4	9GDHSY041SPK13	J		Coated Board,Speaker

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SPEAKER BOX PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
701	9GDHSY042SPK01	J	AQ	Net Frame Ass'y
702	9GDHSY042SPK02	J	AZ	Speaker Box Ass'y
703	9GDHSY042SPK03	J	AH	Duct Pipe
704	PCOVZ1003SJSA	J	AG	Cap,Duct
705	HDECQ0009SJSA	J	AG	Ring,Woofer
706	NSFTZ0001SJFN	J	AH	Shaft,Net
707	9GDHSY042SPK06	J	AL	Terminal,Speaker
708	9GDHSY042SPK07	J	AG	Capacitor,3.3 μF,50V
709	LX-MZ0001SJFN	J	AH	Screw,ø4×16mm
710	LX-MZ0002SJFN	J	AH	Screw,ø3×12mm
711	9GDHSY042SPK08	J	AE	Label,Specifications
712	9GDHSY042SPK09	J	AG	Absorber
713	9GDHSY042SPK04	J	AG	Speaker Cord A
714	9GDHSY042SPK05	J	AG	Speaker Cord B
SP601,602	VSP0012WBF74N	J	AZ	Speaker,Woofer
SP603,604	VSP0025TB394N	J	AY	Speaker,Tweeter

PACKING PARTS

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
1	9GDHSY042SPK10	J	AD	Polyethylene Bag,Speaker
2	SPAKA0019SJZZ	J	AL	Packing Add.,Top,Speaker
3	SPAKA0019SJZZ	J	AL	Packing Add.,Bottom,Speaker
4	9GDHSY042SPK16	J		Polyethylene Sheet,Speaker

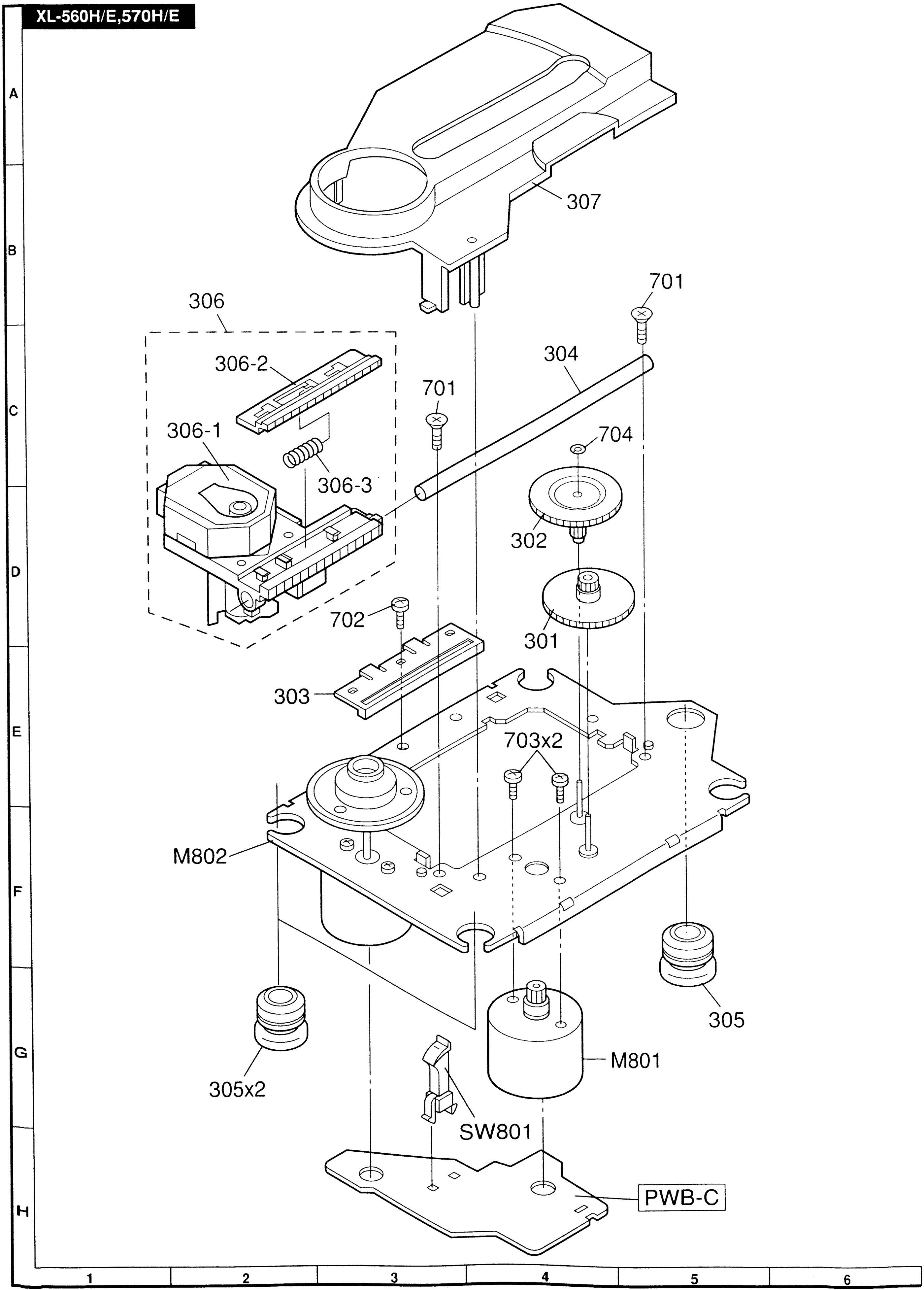
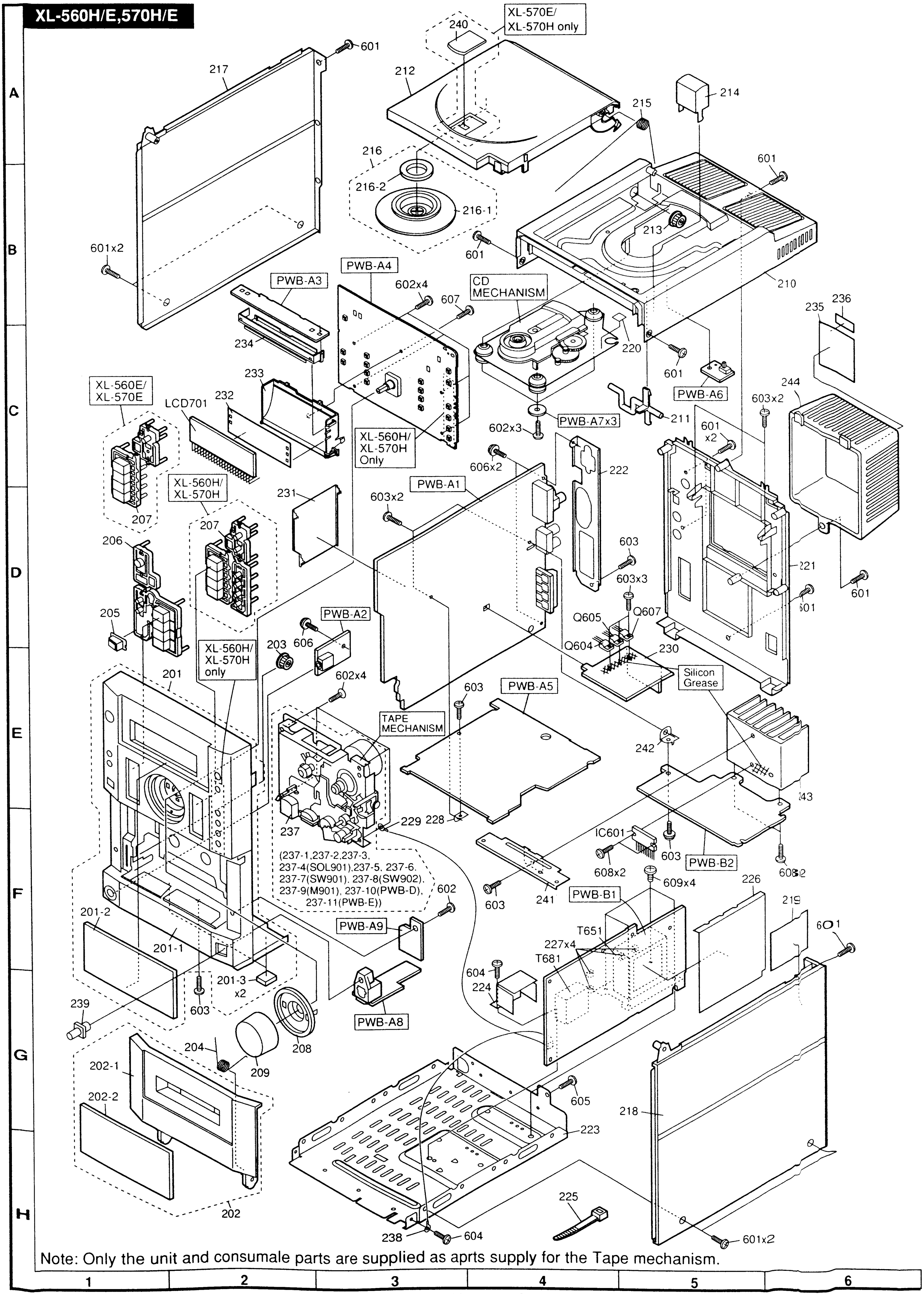

XL-560H/E,570H/E
A
B
C
D
E
F
G
H
307
306
306-2
306-1
306-3
701
304
701
704
302
301
702
303
703x2
M802
305
305x2
M801
SW801
PWB-C
1
2
3
4
5
6

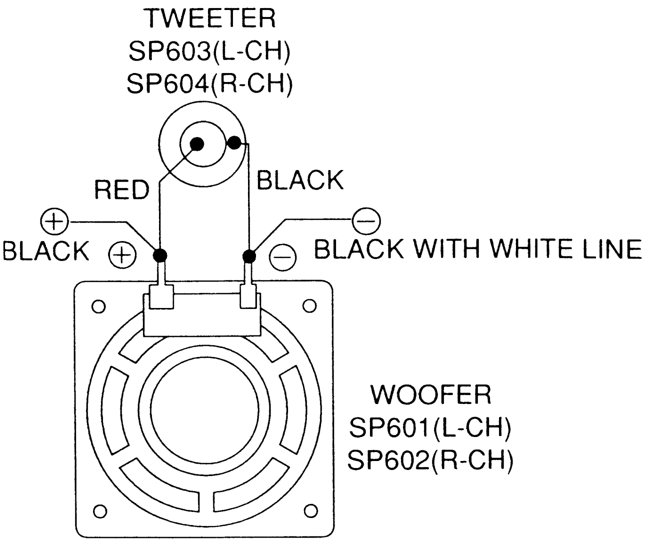
Figure 8 CD MECHANISM EXPLODED VIEW

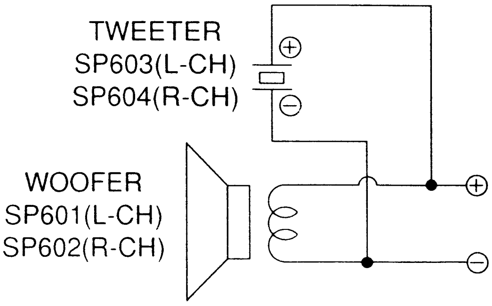

XL-560H/E,570H/E
A
B
C
D
E
F
G
H
1
2
3
4
5
6
240
XL-570E/
XL-570H only
601
217
212
214
215
216
216-2
216-1
601
213
601x2
601
210
PWB-A4
PWB-A3
602x4
607
CD
MECHANISM
235
236
234
220
601
233
244
XL-560E/
XL-570E
LCD701
232
PWB-A6
603x2
211
PWB-A7x3
602x3
601
x2
XL-560H/
XL-570H
Only
606x2
222
PWB-A1
XL-560H/
XL-570H
231
603x2
207
207
206
603
221
603x3
601
601
205
Q605
Q607
PWB-A2
Q604
230
203
606
XL-560H/
XL-570H
only
Silicon
Grease
201
602x4
603
PWB-A5
TAPE
MECHANISM
242
243
229
228
237
IC601
603
PWB-B2
608x2
(237-1,237-2,237-3,
237-4(SOL901),237-5, 237-6.
237-7(SW901), 237-8(SW902),
237-9(M901), 237-10(PWB-D),
237-11(PWB-E))
608x2
609x4
226
219
602
603
241
PWB-B1
601
201-2
PWB-A9
T651
227x4
201-1
T681
604
224
201-3
x2
239
603
PWB-A8
204
208
202-1
209
605
202-2
218
223
225
202
238
604
601x2

Note: Only the unit and consumale parts are supplied as aprts supply for the Tape mechanism.

Figure 9 CABINET EXPLODED VIEW

CP-XL560H


TWEETER
SP603(L-CH)
SP604(R-CH)
RED
BLACK
⊕
⊖
BLACK ⊕
⊖ BLACK WITH WHITE LINE
WOOFER
SP601(L-CH)
SP602(R-CH)


TWEETER
SP603(L-CH)
SP604(R-CH)
⊕
⊖
WOOFER
SP601(L-CH)
SP602(R-CH)
⊕
⊖

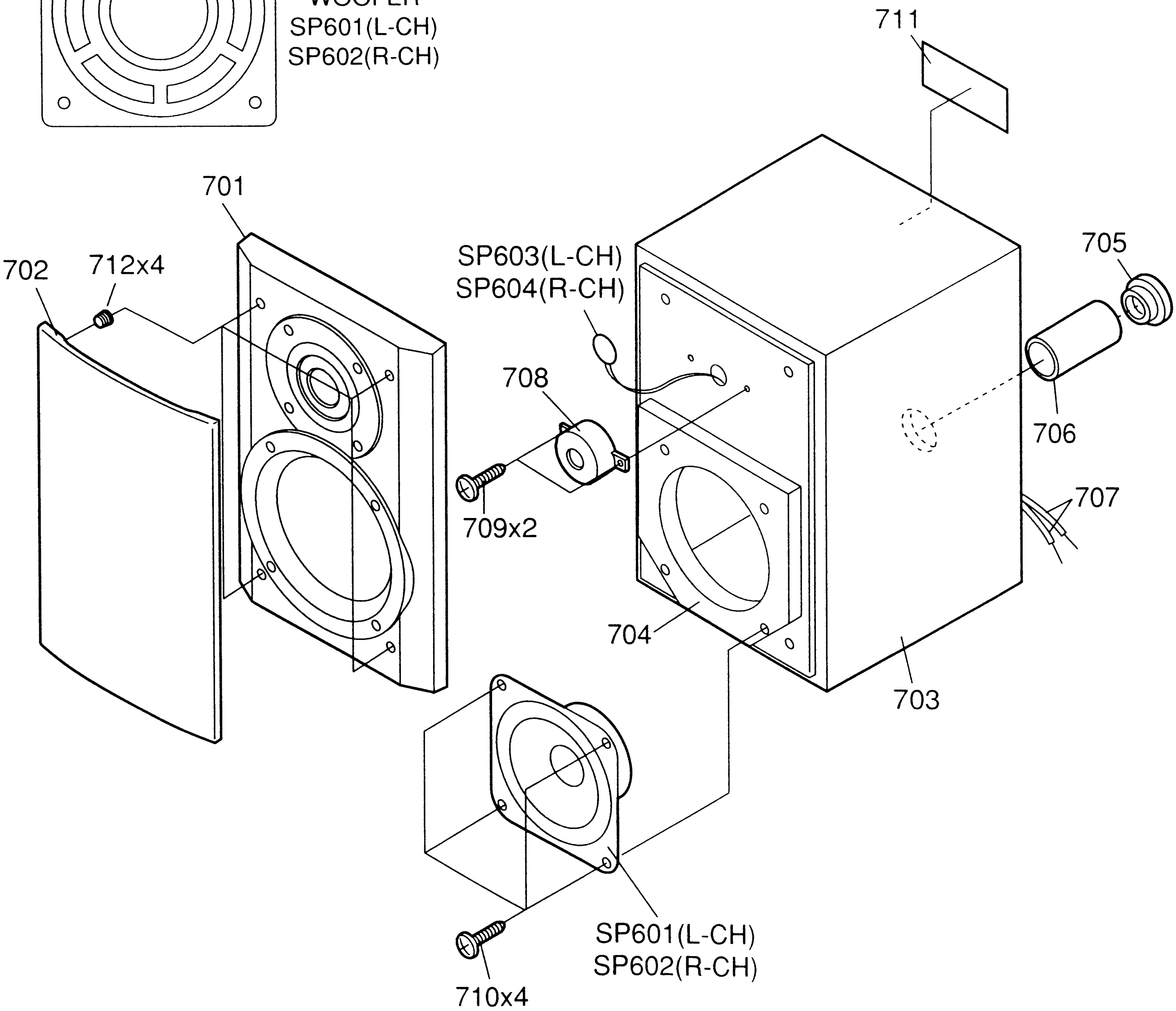

711
701
705
702
712x4
SP603(L-CH)
SP604(R-CH)
708
706
707
709x2
704
703
SP601(L-CH)
SP602(R-CH)
710x4

Figure 10 SPEAKER EXPLODED VIEW (1/2)

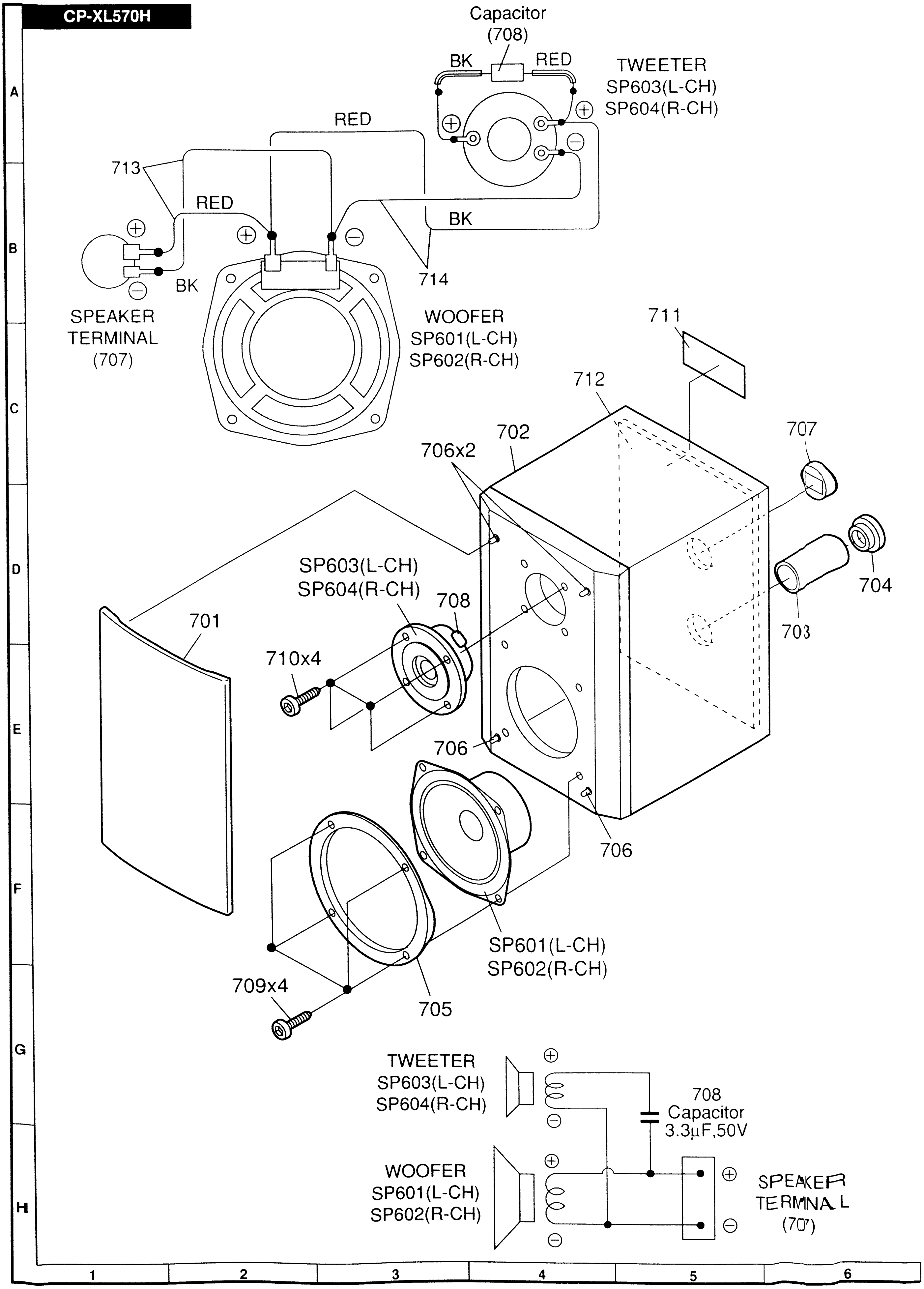

CP-XL570H
Capacitor (708)
BK
RED
TWEETER SP603(L-CH) SP604(R-CH)
⊕
⊖
RED
713
RED
BK
⊕
⊖
BK
714
SPEAKER TERMINAL (707)
WOOFER SP601(L-CH) SP602(R-CH)
711
712
707
702
706x2
704
703
SP603(L-CH) SP604(R-CH)
708
701
710x4
706
706
SP601(L-CH) SP602(R-CH)
709x4
705
TWEETER SP603(L-CH) SP604(R-CH)
708 Capacitor 3.3μF,50V
WOOFER SP601(L-CH) SP602(R-CH)
SPEAKER TERMINAL (707)
A
B
C
D
E
F
G
H
1
2
3
4
5
6

Figure 11 SPEAKER EXPLODED VIEW (2/2)

PACKING OF METHOD (XL-560E/570E FOR U.K. ONLY)

XL-560E/570E

1. AC Power Supply Cord	QACCB0001SJ00
2. AM Loop Antenna	QANTL0002SJZZ
3. FM Antenna	QANTW0002SJZZ
4. Remote Control	RRMCG0017SJSA
5. Packing Add., Left/Right	SPAKA0017SJZZ
6. Packing Case [XL-560E]	SPAKC0049SJZZ
6. Packing Case [XL-570E]	SPAKC0054SJZZ
7. Polyethylene Sheet, Unit	SPAKP0002SJZZ
8. Polyethylene Sheet, AC Power Supply Cord	SPAKP0003SJZZ
9. Polyethylene Bag, Accessories	SSAKA0002SJZZ
10. Operation Manual	TINSE0019SJZZ
11. Feature Label [XL-560E]	TLABM0009SJZZ
11. Feature Label [XL-570E]	TLABM0012SJZZ
12. SER No. Label [XL-560E]	TLABN0044SJZZ
12. SER No. Label [XL-570E]	TLABN0049SJZZ
13. VJ No. Label	TLABZ0015SJZZ
14. Saving Energy Label	TLABZ0034SJZZ
15. R-Card	TCADN0001SJZZ
16. Speaker Cord [XL-570E Only]	QCNWH0004SJZZ

CP-XL560H

1. Polyethylene Bag, Speaker	9GDHSY041SPK09
2. Packing Add., Top, Speaker	SPAKA0019SJZZ
3. Packing Add., Bottom, Speaker	SPAKA0019SJZZ
4. Coated Board, Speaker	9GDHSY041SPK13

CP-XL570H

1. Polyethylene Bag, Speaker	9GDHSY042SPK10
2. Packing Add., Top, Speaker	SPAKA0019SJZZ
3. Packing Add., Bottom, Speaker	SPAKA0019SJZZ
4. Polyethylene Sheet, Speaker	9GDHSY042SPK16

Setting position of switches and knobs	
Tape Mechanism	STOP
Cassette Holder	CLOSE
CD Lid	CLOSE